PROCEEDINGS

OF THE

MADRAS GOVERNMENT

IN THE

PUBLIC WORKS DEPARTMENT

RAILWAY BRANCH,

FOR THE

MONTH OF JULY 1908.

Printed by Authority.

MADRAS:
PRINTED BY THE SUPERINTENDENT, GOVERNMENT PRESS.
1908.

INDEX.

PUBLIC WORKS DEPARTMENT

(RAILWAY).

FOR THE MONTH OF JULY 1908.

ABSENCE, LEAVE OF.

Mr. H. J. Thompson's leave and gratuity.—The Government of India, Department of Commerce and Industry, addressed on the subject of —. **July 16 No. 271 (B)**

A copy of letter addressed to the Government of India, Department of Commerce and Industry, on the subject of —, forwarded to the Railway Board. **July 16, No. 272 (B)**

Leave and leave allowances of Civil and Military officers.—Proceedings in the Financial Department containing a letter from the Government of India, Financial Department, recording the revised arrangements under which all matters connected with — subject to civil leave rules on leave or furlough in England, will in future be dealt with in the Accountant-General's Department of the India Office, recorded. **July 22, No. 282 (B)**

ACCIDENTS.

Local Jurisdiction of Magistrates.—A letter from the District Magistrate, Anantapur, submitting a revised statement showing the extent of the — on the North-West Line in the Anantapur district, communicated to the Agent, Madras and Southern Mahratta Railway. **July 22, No. 286 (B)**

Reward.—Proceedings in the Judicial Department directing the publication in the Fort St. George, the Madras Police and the Nellore District Gazettes of a notification offering a— of Rs. 1,000 to any person giving information leading to the apprehension and conviction of the offenders guilty of an attempt to wreck the Calcutta Mail on 6th July 1908, recorded. **July 24, No. 288 (B)**

ACCOUNTS.

Separation of Local from General finance with effect from 1908-1909.—Certain instructions issued to the Agent, South Indian Railway, in regard to District Board Railways and surveys in connection with the resolution of the Government of India relative to the —. **July 17, No. 273 (A)**

Statement and classification of issues for the month of April 1908.—The Under Secretary of State for India, London, asked if the sum of £650 shown in the — as law charges in connection with the Madras Railway Purchase Act, is in addition to the amount of £1,000 already advised to the Railway Board, and if so, when this Government may expect the usual advice for £1,000. **July 28, No. 292 (B)**

ALLOWANCES AND SALARIES.

Type-writing clerks.—Proceedings in the Financial Department stating that the Government see no reason to increase the existing scale of pay of typists in Government offices and fixing the pay of — who have passed the advanced examination at Rs. 35—1—50, recorded. **July 1, No. 254 (B)**

Salary and allowances to Major W. C. Smyth, R.E., while acting as Agent of the Nizam's Guaranteed State Railway (Limited).—A memorandum from the Railway Board forwarding a copy of their letter to the Agent, His Highness the Nizam's Guaranteed State Railway, stating that the emoluments to be drawn by Major W. C. Smyth, R.E., while acting as Agent during Mr. Pendelbury's absence on leave should be regulated in accordance with the acting and travelling allowance rules of the Nizam's Guaranteed State Railway, recorded. **July 10, No. 264 (B)**

BUDGETS.

Final issues of the Revised and Budget Estimates of the Madras and Southern Mahratta Railway (Broad and Metre gauge sections).—A letter from the Agent, Southern Mahratta Railway, and the Government Examiner, Railway Accounts, forwarding two copies each of the — for the years 1907–1908 and 1908–1909, recorded. **July 4, No. 259 (B)**

Separation of Local from General finance with effect from 1908–1909.—Certain instructions issued to the Agent, South Indian Railway, in regard to District Board Railways and surveys in connection with the resolution of the Government of India relative to the —. **July 17, No. 273 (A)**

CARRIAGES.

Broad-gauge saloon carriage of His Excellency the Governor of Madras.—A letter from the Railway Board sanctioning the removal of the continuous foot-boards from the — and the substitution of short foot-boards at the doorways in place thereof, communicated to the Agent, Madras and Southern Mahratta Railway. **July 22, No. 285 (B)**

CODES AND RULES.

Correspondence rules.—Proceedings in the Public Department issuing an addendum to Rule XXXI of the — issued with G.O., No. 434, Public, dated 10th June 1906, regarding covers containing confidential communications, recorded. **July 31, No. 295 (B)**

COMPENSATION AND LAND.

Land required for the Vizianagram-Raipur Railway.—An erratum to the notification for the acquisition of lands required to be given in exchange for artizan service inam taken up for the Vizianagram-Raipur Railway, approved and ordered to be published in the *Fort St. George Gazette.* **July 1, No. 255 (B)**

Land required for the Coonoor-Ootacamund Railway in Keti village.—A notification for the acquisition of —, approved and ordered to be published in the *Fort St. George Gazette.* **July 4, No. 261 (B)**

Land required for the installation of a 12-ton weigh bridge at Tanjore junction station, in the village of Pudupatnam, Tanjore district.—A notification for the acquisition of —, approved and ordered to be published in the *Fort St. George Gazette.* **July 6, No. 262 (B)**

Land taken up for the Hospet-Kottur Railway.—A draft declaration and a compensation statement in respect of the acquisition of Survey No. 287-A/2 of Hagaribommanahalli village, Hadagalli taluk, approved and ordered to be published in the *Fort St George Gazette.* **July 11, No. 266 (B)**

Land.—A notification for the acquisition of 5 cents of — in Alatur village required by the South Indian Railway for a trial station, approved and ordered to be published in the *Fort St. George Gazette.* **July 18, No. 275 (B)**

——— A notification for the acquisition of 1·04 acres of — in the village of Tepperumanallur in the Kumbakonam taluk required for the provision of a special crossing station at Tepperumanallur on the South Indian Railway, approved and ordered to be published in the *Fort St. George Gazette.* **July 20, No. 278 (B)**

——— Proceedings in the Educational Department regarding the acquisition of a piece of land for a hostel to be attached to the Medical College, Madras, recorded. **July 21, No. 280 (B)**

——— A notification for the acquisition of 1·61 acres of — in the village of Ullur in the Kumbakonam taluk required in connection with the remodelling of the Railway station in Kumbakonam, approved and ordered to be published in the *Fort St. George Gazette.* **July 24, No. 287 (B)**

——— The erratum in respect of certain — taken up for the construction of the Vizianagram-Raipur Railway extension of the Bengal-Nagpur Railway in Gutchini village in the Bobbili taluk, approved and ordered to be published in the *Fort St. George Gazette.* **July 27, No. 290 (B)**

CONTRACTS AND AGREEMENTS.

Agreement for working the Shoranur-Cochin Railway by the South Indian Railway.—The revised —, forwarded, for acceptance, to the Resident in Travancore and Cochin, through the Political Department. **July 9, No. 263 (B)**

CORRESPONDENCE.

Correspondence rules.—Proceedings in the Public Department issuing an addendum to Rule XXXI of the — issued with G.O., No. 434, Public, dated 10th June 1906, regarding covers containing confidential communications, recorded. **July 31, No. 295 (B)**

ESTABLISHMENT.

Type writing clerks.—Proceedings in the Financial Department stating that the Government see no reason to increase the existing scale of pay of typists in Government offices and fixing the pay of — who have passed the advanced examination at Rs. 35—1—50, recorded. **July 1, No. 254 (B)**

"*Watch and ward*" *establishment.*—Proceedings in the Judicial Department directing that the limit up to which charges on account of the — employed on the South Indian Railway may be admitted by the Accountant-General be raised from Rs. 7,500 to Rs. 15,000 per annum, communicated to the Agent, South Indian Railway. **July 3, No. 256 (B)**

GRATUITY AND PENSION.

Mr. H. J. Thompson's leave and gratuity.—The Government of India, Department of Commerce and Industry, addressed on the subject of —. **July 16, No. 271 (B)**

A copy of letter addressed to the Government of India, Department of Commerce and Industry, on the subject of —, forwarded to the Railway Board. **July 16, No. 272 (B)**

HONORARIUM.

Reward.—Proceedings in the Judicial Department directing the publication in the Fort St. George, the Madras Police and the Nellore District Gazettes of a notification offering a — of Rs. 1,000 to any person giving information leading to the apprehension and conviction of the offenders guilty of an attempt to wreck the Calcutta Mail on 6th July 1908, recorded. **July 24, No. 288 (B)**

INSPECTION.

Report of an Inspection of the Shoranur-Cochin Railway by the Senior Government Inspector of Railways for the year ended the 31*st December* 1907.—A copy of the —, forwarded to the Resident in Travancore and Cochin, for transmission to the Travancore Darbar. **July 22, No. 283 (B)**

Report of an Inspection of the Travancore Branch Railway by the Senior Government Inspector of Railways for the year ended the 31*st December* 1907.—A copy of the —, forwarded to the Resident in the Travancore and Cochin for transmission to the Travancore Darbar. **July 22, No. 284 (B)**

JUDICIAL.

Local Jurisdiction of Magistrates.—A letter from the District Magistrate, Anantapur, submitting a revised statement showing the extent of — on the North-West Line in Anantapur district, communicated to the Agent, Madras and Southern Mahratta Railway. **July 22, No. 286 (B)**

LINES.

Reconstitution of the South Indian Railway Company.—The Right Honourable the Secretary of State for India addressed with regard to a proposal which is under his consideration for the —. **July 4, No. 8-257 (A)**

——— Copy of a despatch to the Right Honourable the Secretary of State for India dealing with a proposal which is under his consideration for the —, forwarded with remarks to the Government of India, Department of Commerce and Industry. **July 4, No. 258 (A)**

——— A copy of letter No. 258 Ry., dated the 4th July 1908, to the Government of India, Department of Commerce and Industry, and a despatch to the Right Honourable the Secretary of State for India, No. 8/257 Ry., dated 4th July 1908, regarding the —, forwarded for the information of the Railway Board. **July 10, No. 265 (B)**

Panruti-Trichinopoly Chord Railway.—A letter from the Railway Board stating that they have already expressed the opinion that the — will form part of an important main route and that it should be built to the standard of a main line, recorded. **July 15, No. 270 (A)**

Triennial programme.—The views of the Chamber of Commerce requested as to the order in which new railways to be constructed out of Imperial funds in the Presidency should be undertaken. **July 18, No. 276 (B)**

New Railway lines.—A list of — to be constructed out of Imperial funds, forwarded to the Railway Board. **July 30, No. 293 (A)**

MEDICAL.

Major Lamb's pamphlet on Rabies and Anti-Rabic treatment in India.—Proceedings in the Public Department requesting the Superintendent, Government Press, Madras, to print and distribute 10,000 copies of the —, communicated to the Railway Administration. **July 21, No. 281 (B)**

MISCELLANEOUS.

Form of combined forwarding and credit note.—A new —, issued for adoption in the case of Government consignments transmitted by the South Indian and the Madras and Southern Mahratta Railways. **July 4, No. 260 (A)**

Note on the matters of interest on the Madras (Broad gauge) section of the Madras and Southern Mahratta Railway for the month of May 1908.—A —, recorded. **July 6, No. 262/A (B)**

Advance for the purchase of houses.—Proceedings in the Financial Department containing a resolution of the Government of India, Finance Department, sanctioning the grant under article 136 (*a*) of the Civil Account Code of — in places where house-rent is exceptionally high, recorded. **July 17, No. 274 (B)**

Pushkaram festival.—The Agent, Madras and Southern Mahratta Railway, addressed with regard to the running of special trains on the occasion of the — at Rajahmundry. **July 18, No. 277 (B)**

OFFICIALS.

Salary and allowances to Major W. C. Smyth, R.E., while acting as Agent of the Nizam's Guaranteed State Railway (Limited).—A memorandum from the Railway Board forwarding a copy of their letter to the Agent, His Highness the Nizam's Guaranteed State Railway, stating that the emoluments to be drawn by Major W. C. Smyth, R.E., while acting as Agent during Mr. Pendelbury's absence on leave should be regulated in accordance with the acting and travelling allowance rules of the Nizam's Guaranteed State Railway, recorded. **July 10, No. 264 (B)**

Mr. H. J. Thompson's leave and gratuity.—The Government of India, Department of Commerce and Industry, addressed on the subject of —. **July 16, No. 271 (B)**

A copy of the letter addressed to the Government of India, Department of Commerce and Industry, on the subject of —, forwarded to the Railway Board. **July 16, No. 272 (B)**

OFFICIALS—GENERAL.

Leave and leave allowances of Civil and Military officers.—Proceedings in the Financial Department containing a letter from the Government of India, Financial Department, recording the revised arrangements under which all matters connected with the — subject to civil leave rules on leave or furlough in England will in future be dealt with in the Accountant-General's Department of the India Office, recorded. **July 22, No. 282 (B)**

PERIODICALS AND PUBLICATIONS.

Delegation of powers.—Proceedings in the Financial Department empowering all heads of departments to whom newspapers or periodicals are supplied under the sanction of Government to alter the sanctioned scale of supply to their own offices or to officers subordinate to them, provided that no extra cost is involved thereby and directing that all orders sanctioning such alterations should be communicated by the head of department concerned to the Superintendent of Stationery and to the Accountant-General, recorded. **July 1, No. 253 (B)**

Report on the working of the rules regarding the supply of books and periodicals.—Proceedings in the Financial Department containing the report of the Superintendent of Stationery on the working of the rules regarding the supply of books and periodicals during the year 1907–1908, recorded. **July 21, No. 279 (B)**

Major Lamb's pamphlet on Rabies and Anti-Rabic treatment in India.—Proceedings in the Public Department requesting the Superintendent, Government Press, Madras, to print and distribute 10,000 copies of the —, communicated to the Railway Administrations. **July 21, No. 281 (B)**

POLICE.

"*Watch and ward*" *establishment.*—Proceedings in the Judicial Department directing that the limit up to which charges on account of the — employed on the South Indian Railway may be admitted by the Accountant-General, be raised from Rs. 7,500 to Rs. 15,000 per annum, communicated to the Agent, South Indian Railway. **July 3, No. 256 (B)**

POWERS.

Delegation of powers.—Proceedings in the Financial Department empowering all heads of departments to whom newspapers or periodicals are supplied under the sanction of Government, to alter the sanctioned scale of supply to their own offices or to offices subordinate to them, provided that no extra cost is involved thereby, and directing that all orders sanctioning such alterations should be communicated by the head of department concerned to the Superintendent of Stationery and to the Accountant-General, recorded. **July 1, No. 253 (B)**

PROJECTS.

Project for a metre-gauge line from Suramangalam to Atur.—The Agent, South Indian Railway, requested to modify the — so as to make the break of gauge at Salem town instead of at Suramangalam. **July 28, No. 291 (B)**

Project for connecting Manaar by railway with the general railway system of Ceylon.—A letter from the Colonial Secretary, Colombo, furnishing certain information regarding the —, recorded. **July 30, No. 294 (A)**

RATES AND FARES.

Concession rates for the carriage by rail of sun-dried tapioca.—A memorandum from the Railway Board regarding the —, recorded. **July 11, No. 268 (B)**

REPORTS.

Report of an Inspection of the Shoranur-Cochin Railway by the Senior Government Inspector of Railways for the year ended the 31*st December* 1907.—A copy of the —, forwarded to the Resident in Travancore and Cochin, for transmission to the Cochin Darbar. **July 22, No. 283 (B)**

Report of an Inspection of the Travancore Branch Railway by the Senior Government Inspector of Railways for the year ended the 31*st December* 1907.—A copy of the —, forwarded to the Resident in Travancore and Cochin for transmission to the Travancore Darbar. **July 22, No. 284 (B)**

SIDINGS.

Construction of a Railway siding through Gundu reserved forest.—Proceedings in the Revenue Department ordering all work connected with the — to be stopped till the land required for the purpose is formally acquired, communicated to the Agent, Madras and Southern Mahratta Railway. **July 24, No. 289 (B)**

SURVEYS.

Survey of a branch line from Podanur to Pollachi.—Proceedings in the Local and Municipal Department requesting the District Board of Coimbatore to place, at the disposal of the Agent, a sum of Rs. 11,700 required for the —, communicated to the Agent, South Indian Railway. **July 14, No. 269 (B)**

TRAFFIC.

Form of combined forwarding and credit note.—A new —, issued for adoption in the case of Government consignments transmitted by the South Indian and the Madras and Southern Mahratta Railways. **July 4, No. 260 (A)**

Pushkaram festival.—The Agent, Madras and Southern Mahratta Railway, addressed with regard to the running of special trains on the occasion of the — at Rajahmundry. **July 18, No. 277 (B)**

WORKSHOPS.

Extensions and improvements to the Negapatam shops.—The Railway Board requested to give their special attention to the recommendations of the Government Inspector in his inspection report of the South Indian Railway for the year ended 31st December 1907, in order that immediate provision may be made for such temporary — as can be undertaken without prejudice to the scheme for building new and up-to-date shops at Trichinopoly or elsewhere. **July 11, No. 267 (B)**

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

RAILWAY.

TABLE OF CONTENTS OF (A) PRINTED PROCEEDINGS.

FOR THE MONTH OF JULY 1908.

Number.	Date of Proceedings. Month and Date.	Date of Despatch to Secretary of State for India.	Numbers and Dates of previous Proceedings.	Subject.
$\frac{8}{257}$ Ry.	1908. 4th July	...	......	*Reconstitution of the South Indian Railway Company.*—Addressing the Right Honourable the Secretary of State for India with regard to a proposal which is under his consideration for the —.
258 Ry.	4th „	...	......	*Reconstitution of the South Indian Railway Company.*—Forwarding to the Government of India, Department of Commerce and Industry, with remarks, copy of a despatch to the Right Honourable the Secretary of State for India, dealing with a proposal which is under his consideration for the —.
260 Ry.	4th „	...	......	*Form of combined forwarding and credit note.*—Issuing a new — for adoption in the case of Government consignments transmitted by the South Indian and the Madras and Southern Mahratta Railways.
270 Ry.	15th „	...	9th Oct. 1907, No. 1490 Ry. 23rd Dec. 1907, No. 1894 Ry. 12th June 1907, No. 955 Ry. 15th April 1907, No. 618 Ry. 18th Feb. 1907, No. 329 Ry. 28th Jan. 1907, No. 182 Ry. 20th Feb. 1909, No. 348 Ry. 9th Jan. 1907, No. 52 Ry.	*Panruti-Trichinopoly Chord Railway.*—Recording a letter from the Railway Board stating that they have already expressed the opinion that the — will form part of an important main route and that it should be built to the standard of a main line.

Number.	Date of Proceedings. Month and Date.	Date of Despatch to Secretary of State for India.	Numbers and Dates of previous Proceedings.	Subject.
273 Ry.	1908. 17th July	...	1st Feb. 1908, No. 72 Finl.,	*Separation of Local from General finance with effect from* 1908–1909.—Issuing certain instructions to the Agent, South Indian Railway, in regard to District Board Railways and surveys in connection with the resolution of the Government of India relative to the —.
293 Ry.	30th „	...	15th July 1908, No. 276 Ry. 10th Sept. 1907 No. $\frac{1392}{A}$ Ry. 20th Sept. 1906, No. 1570 Ry., 31st July 1905, No. 1395 Ry.	*New Railway lines.*—Forwarding to the Railway Board a list of — to be constructed out of Imperial funds.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

RAILWAY.

TABLE OF CONTENTS OF (B) MANUSCRIPT PROCEEDINGS.

FOR THE MONTH OF JULY 1908.

Number.	Date of Proceedings. Month and Date.	Date of Despatch to Secretary of State for India.	Numbers and Dates of previous Proceedings.	Subject.
253 Ry.	1908. 1st July	...	......	*Delegation of powers.*—Recording Proceedings in the Financial Department empowering all heads of departments to whom newspapers or periodicals are supplied under the sanction of Government, to alter the sanctioned scale of supply to their own offices or to offices subordinate to them, provided that no extra cost is involved thereby, and directing that all orders sanctioning such alterations should be communicated by the head of department concerned to the Superintendent of Stationery and to the Accountant-General.
254 Ry.	1st "	...	......	*Type-writing clerks.*—Recording Proceedings in the Financial Department stating that the Government see no reason to increase the existing scale of pay of typists in Government offices and fixing the pay of — who have passed the advanced examination at Rs. 35—1—50.
255 Ry.	1st "	...	28th April 1908, No. 185 Ry.	*Land required for the Vizanagram-Raipur Railway.*—An erratum to the notification for the acquisition of lands required to be given in exchange for artizan service inam taken up for the Vizanagram-Raipur Railway, approved and ordered to be published in the *Fort St. George Gazette.*
256 Ry.	3rd "	...	15th Nov. 1906, No. 1841 Ry.	"*Watch and ward*" *establishment.*—Communicating to the Agent, South Indian Railway, Proceedings in the Judicial Department directing that the limit up to which charges on account of the — employed on the South Indian Railway may be admitted by the Accountant-General, be raised from Rupees 7,500 to Rs. 15,000 per annum.

Number.	Date of Proceedings. Month and Date.	Date of Despatch to Secretary of State for India.	Numbers and Dates of previous Proceedings.	Subject.
259 Ry.	1908. 4th July	...	......	*Final issues of the Revised and Budget Estimates of the Madras and Southern Mahratta Railway (Broad and Metre gauge section).*—Recording a letter from the Agent Southern Mahratta Railway, and the Government Examiner, Railway Accounts, forwarding two copies each of the — for the year 1907–1908 and 1908–1909.
261 Ry.	4th „	...	......	*Land required for the Coonoor-Ootacamund Railway in Keti village.*—A notification for the acquisition of — approved and ordered to be published in the *Fort St. George Gazette.*
262 Ry.	6th „	...	......	*Land required for the installation of a 12-ton weigh bridge at Tanjore junction station, in the village of Pudupatnam, Tanjore district.*—A notification for the acquisition of —, approved and ordered to be published in the *Fort St. George Gazette.*
262/A Ry.	6th „	...	... ..	*Note on the matters of interest on the Madras (Broad gauge) section of the Madras and Southern Mahratta Railway for the month of May* 1908.—Recording a —.
263 Ry.	9th „	...	25th Feb. 1908, No. 109 Ry.	*Agreement for working the Shoranur-Cochin Railway by the South Indian Railway.*—Forwarding, for acceptance, to the Resident in Travancore and Cochin, through the Political Department, the revised —.
264 Ry.	10th „	...	......	*Salary and allowances to Major W. C. Smyth, R.E., while acting as Agent of the Nizam's Guaranteed State Railway (Limited).*—Recording a memorandum from the Railway Board forwarding a copy of their letter to the Agent, His Highness the Nizam's Guaranteed State Railway, stating that the emoluments to be drawn by Major W. C. Smyth, R.E. while acting as Agent during Mr. Pendelbury's absence on leave should be regulated in accordance with the acting and travelling allowance rules of the Nizam's Guaranteed State Railway.
265 Ry.	10th „	...	......	*Reconstitution of the South Indian Railway Company.*—Forwarding, for the information of the Railway Board, a copy of letter No. 258 Ry., dated the 4th July 1908, to the Government of India, Department of Commerce and Industry, and a despatch to the Right Honourable the Secretary of State for India, No. 8/257 Ry., dated 4th July 1908, regarding the —.
266 Ry.	11th „	...	......	*Land taken up for the Hospet-Kottur Railway.*—A draft declaration and a compensation statement in respect of the acquisition of Survey No. 287-A/2 of Hagaribommanahalli village, Hadagalli taluk, approved and ordered to be published in the *Fort St. George Gazette.*

Number.	Date of Proceedings. Month and Date.	Date of Despatch to Secretary of State for India.	Numbers and Dates of previous Proceedings.	Subject.
267 Ry.	1908. 11th July	...	......	*Extensions and improvements to the Negapatam shops.*—Requesting the Railway Board to give their special attention to the recommendations of the Government Inspector in his inspection report of the South Indian Railway for the year ended 31st December 1907, in order that immediate provision may be made for such temporary as can be undertaken without prejudice to the scheme for building new and up-to-date shops at Trichinopoly or elsewhere.
268 Ry.	11th ,,	...	......	*Concession rates for the carriage by rail of sun-dried tapioca.*—Recording a memorandum from the Railway Board regarding the —.
269 Ry.	14th ,,	...	......	*Survey of a branch line from Podanur to Pollachi.*—Communicating to the Agent, South Indian Railway, Proceedings in the Local and Municipal Department requesting the District Board of Coimbatore to place, at the disposal of the Agent, a sum of Rs. 11,700 required for the —.
271 Ry.	16th ,,	...	......	*Mr. H. J. Thompson leave and gratuities.*—Addressing the Government of India, Department of Commerce and Industry, on the subject of —.
272 Ry.	16th ,,	...	......	Forwarding to the Railway Board a copy of letter addressed to the Government of India Department of Commerce and Industry on the subject of —.
274 Ry.	17th ,,	...	13th Sept. 1906, No. 1557 Ry.	*Advance for the purchase of houses.*—Recording Proceedings in the Financial Department, containing a resolution of the Government of India, Finance Department, sanctioning the grant under article 136 (a) of the Civil Account Code of — in places where house-rent is exceptionally high.
275 Ry.	18th ,,	...	......	*Land.*—A notification for the acquisition of 5 cents of — in Alatur village required by the South Indian Railway for a trial station, approved and ordered to be published in the *Fort St. George Gazette.*
276 Ry.	18th ,,	...	......	*Triennial programme.*—Requesting the views of the Chamber of Commerce, as to the order in which new railways to be constructed out of Imperial funds in the Presidency should be undertaken.
277 Ry.	18th ,,	...	......	*Pushkaram festival.*—Addressing the Agent, Madras and Southern Mahratta Railway, with regard to the running of special trains on the occasion of the — at Rajamundry.

Number.	Date of Proceedings. Month and Date.	Date of Despatch to Secretary of State for India.	Numbers and Dates of previous Proceedings.	Subject.
278 Ry.	1908. 20th July	...	......	*Land.*—A notification for the acquisition of 1·04 acres of — in the village of Tepperumanallur in the Kumbakónam taluk required for the provision of a special crossing station at Tepperumanallur on the South Indian Railway approved and ordered to be published in the *Fort St. George Gazette.*
279 Ry.	21st "	...	9th Nov. 1907, No. 1676 Ry.	*Report on the working of the rules regarding the supply of books and periodicals.*—Recording Proceedings in the Financial Department containing the report of the Superintendent of Stationery on the working of the rules regarding the supply of books and periodicals during the year 1907-1908.
280 Ry.	21st "	...	......	*Land.*—Recording Proceedings in the Educational Department regarding the acquisition of a piece of land for a hostel to be attached to the Medical College, Madras.
281 Ry.	21st "	...	......	*Major Lamb's pamphlet on Rabies and Anti-Rabic treatment in India.*—Communicating to the Railway Administration, Proceedings in the Public Department requesting the Superintendent, Government Press, Madras, to print and distribute 10,000 copies of the —.
282 Ry.	22nd "	...	12th June 1908, No. 226 Ry.	*Leave and leave allowances of Civil and Military officers.*—Recording Proceedings in the Financial Department containing a letter from the Government of India, Financial Department, recording the revised arrangements under which all matters connected with — subject to civil leave rules on leave or furlough in England, will in future be dealt with in the Accountant-General's Department of the India Office.
283 Ry.	22nd "	...	......	*Report of an Inspection of the Shoranur-Cochin Railway by the Senior Government Inspector of Railways for the year ended the 31st December 1907.*—Forwarding a copy of the — to the Resident in Travancore and Cochin, for transmission to the Cochin Durbar.
284 Ry.	22nd "	...	......	*Report of an Inspection of the Travancore Branch Railway by the Senior Government Inspector of Railways for the year ended the 31st December 1907.*—Forwarding a copy of the — to the Resident in the Travancore and Cochin for transmission to the Travancore Darbar.

Number.	Date of Proceedings. Month and Date.	Date of Despatch to Secretary of State for India.	Numbers and Dates of previous Proceedings.	Subject.
285 Ry.	1908. 22nd July	...	......	*Broad-gauge saloon carriage of His Excellency the Governor of Madras.*—Communicating to the Agent, Madras and Southern Mahratta Railway, a letter from the Railway Board sanctioning the removal of the continuous foot-boards from the — and the substitution of short foot-board at the doorways in place thereof.
286 Ry.	22nd "	...	16th Dec. 1907, No. 1139 Ry.	*Local Jurisdiction of Magistrates.*—Communicating to the Agent, Madras and Southern Mahratta Railway, a letter from the District Magistrate, Anantapur, submitting a revised statement showing the extent of the — on the North-West Line in the Anantapur district.
287 Ry.	24th "	...	......	*Land.*—A notification for the acquisition of 1·61 acres of — in the village of Ullur in the Kumbakonam taluk required in connection with the remodelling of the Railway station in Kumbakonam, approved and ordered to be published in the *Fort St. George Gazette.*
288 Ry.	24th "	...	......	*Reward.*—Recording Proceedings in the Judicial Department directing the publication in the *Fort St. George Gazette*, the *Madras Police Gazette* and the *Nellore District Gazette* of a notification offering a — of Rs. 1,000 to any person giving information leading to the apprehension and conviction of the offenders guilty of an attempt to wreck the Calcutta Mail on 6th July 1908.
289 Ry.	24th "	...	......	*Construction of a Railway siding through Gundu reserved forest.*—Communicating to the Agent, Madras and Southern Mahratta Railway, Proceedings in the Revenue Department ordering all work connected with the — to be stopped till the land required for the purpose is formally acquired.
290 Ry.	27th "	...	4th Mar. 1907, No. 425 Ry. 15th July 1907, No. 1092 Ry.	*Land.*—The erratum in respect of certain — taken up for the construction of the Vizagapatam-Raipur Railway extension of the Bengal-Nagpur Railway in Gutchini village in the Bobili taluk, approved and ordered to be published in the *Fort St. George Gazette.*
291 Ry.	28th "	...	......	*Project for a metre-gauge line from Suramangalam to Atur.*—Requesting the Agent, South Indian Railway, to modify the so as to make the break of gauge at Salem town instead of at Suramangalam.

Number.	Date of Proceedings. Month and Date.	Date of Despatch to Secretary of State for India.	Numbers and Dates of previous Proceedings.	Subject.
292 Ry.	1908. 28th July	...	......	*Statement and classification of issues for the month of April* 1908.—Asking the Under Secretary of State for India, London, if the sum of Rs. 650 shown in the — as Law charges in connection with the Madras Railway Purchase Act, is in addition to the amount of £1,000 already advised to the Railway Board, and if so, when this Government may expect the usual advice for £1,000.
294 Ry.	30th "	...	......	*Project for connecting Manaar by railway with the general railway system of Ceylon.*—Recording a letter from the Colonial Secretary, Colombo, furnishing certain information regarding the —.
295 Ry.	31st "	...	12th July 1906, No. 1243 Ry. 27th March 1908, No. 155 Ry.	*Correspondence rules.*—Recording Proceedings in the Public Department issuing an addendum to rule XXXI of the — issued with G.O., No. 434, Public, dated 10th June 1906, regarding covers containing confidential communications.

No. 258 Ry., 4th July 1908.

CONFIDENTIAL.

Government of Madras.

PUBLIC WORKS DEPARTMENT.

RAILWAY.

Recd. } 1908. *Enclosures*

Regd. *Spare copies*

G.O., No. 260 Ry., 4th July 1908.

Forms of combined forwarding and credit note

Issuing a new — for adoption in the case of all Government consignments transmitted by the South Indian and the Madras and Southern Mahratta Railways.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

RAILWAY.

Read—the following papers :—

I

Letter—from Mr. Neville Priestley, Agent, South Indian Railway.
To—the Secretary to Government, Public Works Department (Ry.).
Dated—the 10th February 1908.
No.—A.T. 119/2 (*c*)/28.

With reference to correspondence ending with my letter No. A.T. 119/2 (*c*)/21 of the 16th July 1907, to the Consulting Engineer for Railways, Madras, on the subject of combined form of forwarding and credit note for Government Consignments I have to refer you to Railway Board's letter No. 1037 R.T., dated Simla, 19th September 1907, to the President, Indian Railway Conference Association, and Resolution No. 89 passed by the said Conference held at Simla in September and October 1907 on the above subject and request that you will again kindly move the Government of Madras to adopt the form of combined forwarding and credit note, now approved, by all the Departments under its control.

II

Endorsement No. 1090-1, Public, dated 23rd March 1908.

Referred to the Agent for Government Consignments for favour of remarks.

(By Order.)

A. Galletti,
Ag. Under Secretary to Government.

To the Agent for Government Consignments (with current papers in original).

III

Letter—from Mr. T. H. Baker, Agent for Government Consignments, Madras.
To—the Under Secretary to Government, Public Department.
Dated—the 26th March 1908.
No.—A 230/8588.

[*Reference.*—Your endorsement No. 1090-1, dated 20th March 1908.]

I have the honour to state that, so far as this office is concerned, there is no objection to the proposed combined form of credit and forwarding note for Government Consignments being brought into use ; in fact its adoption would prove advantageous in many respects to the office using it.

2. The enclosures are herewith returned.

IV

Letter—from Mr. F. D. Fowler, Secretary to Govt., Public Works Dept. (Ry.).
To—the Agent, Madras and Southern Mahratta Railway, Dharwar.
Dated—the 8th May 1908.
No.—20 R.M./O.

I am directed to inform you that the Agent, South Indian Railway, has asked Government to accept the attached form of combined forwarding and credit note in the case of all Government Consignments transmitted by that Railway and to enquire whether this form is at present used on the Madras and Southern Mahratta Railway System. It would be convenient if the same form for Government Stores sent by any Railway were in use on both Railways.

V

Letter—from Mr. A. R. Anderson, Acting Agent, Madras and Southern Mahratta Ry. Co. (Limited).
To—the Secretary to Government, P.W.D. (Railway).
Dated—the 15th May 1908.
No.—5446.

With reference to your letter No. 20 R.M./O., dated the 8th instant, I have the honour to inform you that the form of combined forwarding and credit note therewith sent is not now in use on this Railway.

I enclose, for your information, a copy of letter No. 358, dated the 20th ultimo, from the Secretary, Indian Railway Conference Association and of its accompaniment, from which it will be seen that the Railway Board have amended the form so as to show the number of vehicles required and their description, number and carrying capacity, and I have informed the Secretary of the Railway Conference that the revised form will meet the requirements of this Railway.

Enclosures.

Letter—from Mr. D. Ross-Johnson, Secretary, Indian Ry. Conference Association.
To—the Agents, South Indian, Madras and Southern Mahratta Railway System (Madras Section) and Madras and Southern Mahratta Railway (Dharwar).
Dated—the 20th April 1908.
No.—358.

With reference to Conference Circular letter No. 1250 of the 11th November 1907, on the subject of a combined form of forwarding and credit note for Government consignments, I am directed to forward copies of correspondence marginally noted, and to request the favour of your kindly letting the undersigned know if the form attached, as amended by the Railway Board, will, in your opinion, meet the requirements of railways.

Letter No. 1265, dated 20th November 1907.
From Secretary, Indian Railway Conference Association.
To Secretary, Railway Board.
Letter No. 1337, dated 26th December 1907.
From Secretary, Indian Railway Conference Association.
To Secretary, Railway Board.
Letter No. 533 R.T., dated 16th March 1908.
From Secretary, Railway Board.
To Secretary, Indian Railway Conference Association.

2. The only change, it will be noticed, is in the addition of a column for "number of vehicles required" and a form on the back for the detail particulars of these vehicles to be given therein.

Letter—from the Secretary, Indian Railway Conference Association.
To—the Secretary, Railway Board.
Dated—the 20th November 1907.
No.—1265.

With reference to your letter No. 1037 R.T., dated 19th September 1907, on the subject of a combined form of forwarding and credit note, I am directed to forward you a copy of letter No. 1250, dated 11th November 1907, circulated to all Railways and to invite attention to paragraph 2 with a request to ask the Military Department to print and stock the form now agreed to.

Letter—from the Secretary, Indian Railway Conference Association.

To—the Secretary, Railway Board.

Dated—the 26th December 1907.

No.—1337.

I am directed to invite your attention to this office letter No. 1265, dated 20th November 1907, having reference to correspondence ending with your No. 1037 R.T., dated 19th September last, on the subject of a combined form of forwarding and credit note for Government stores, and to request that I may be placed in a position to inform railways of the date from which the revised form will be brought into use in substitution of existing forms.

Letter—from the Secretary, Railway Board.

To—the Secretary, Indian Railway Conference Association, Jubbulpore.

Dated—the 16th March 1908.

No.—533/R.T.

With reference to your letter No. 1337 of 26th December 1907, I am directed to state that as the combined form of forwarding and credit note printed at page 123 of the Proceedings of the Indian Railway Conference Association for 1907 was drawn up prior to the acceptance of the vehicle rates for the carriage of military traffic by rail—*vide* Resolution 80 of the Proceedings—it seems necessary to further modify the form to suit the requirements of the new rules.

2. The enclosed form has accordingly been revised by the Army Department to show the number of vehicles provided and their description, number and carrying capacity. The line at foot of the table has also been altered to read "signature of despatching officer."

3. I am to enquire whether the amended form (which should be returned) will meet the requirements of the revised rules for the carriage of military traffic and if it is acceptable to the Indian Railway Conference Association for introduction on railways.

VI

Letter—from Mr. F. D. Fowler, Secretary to Government, Public Works Department (Railway).

To—the Agent, South Indian Railway.

Dated—the 27th May 1908.

No.—67 R.M./O.

With reference to your letter No. A.T. 119/2 (*c*)-28, dated the 10th February 1908, I am directed to refer you to letter No. 358, dated the 20th April 1908, from the Secretary, Indian Railway Conference Association, to your address and to enquire if your Company have agreed to adopt the amended form circulated with that letter.

VII

Letter—from Mr. Neville Priestley, Agent, South Indian Railway.

To—the Secretary to Government, Public Works Department (Railway).

Dated—the 8th June 1908.

No.—A.T. 119/2 (*c*)-38.

With reference to your letter No. 67 R.M./O., dated the 27th ultimo, regarding the above, I have the honour to inform you I have replied in the affirmative to Conference letter No. 358 of the 20th April 1908.

VIII

Telegram—from Mr. F. D. Fowler, Secretary to Government, Public Works Department (Ry.)

To—the Agent, Madras and Southern Mahratta Ry. (Madras Section), Rayapuram.

Dated—the 12th June 1908.

No.—4-A.

Please wire if you have agreed to adopt the amended form of combined forwarding and credit note for Government consignments circulated with Secretary, Indian Railway Conference Association's letter No. 358, dated 20th April last.

IX

Telegram—from Mr. H. J. Thompson, Acting Agent, Madras and Southern Mahratta Railway (Madras Section).

To—the Secretary to Government, Public Works Department (Railway).

Dated—the 12th June 1908.

No.—579.

Your wire 4-A of date have agreed.

Order—No. 260 Ry., dated 4th July 1908.

The form of combined forwarding and credit note appended to these proceedings will be adopted in the case of all Government consignments transmitted by the South Indian and Madras and Southern Mahratta Railways.

(True Extract.)

F. D. Fowler,
Secretary to Government.

To the departments of the Secretariat (except Legislative and Pension).
,, Agent for Government Consignments.

Copy to the Assistant Adjutant-General, 9th (Secunderabad) division.
,, ,, Controller of Military Accounts, Secunderabad and Burma Circle.
,, ,, Agent, South Indian Railway.
,, ,, Agent, Madras and Southern Mahratta Railway.
,, ,, Government Examiner, Railway Accounts, Madras.
,, ,, ,, ,, ,, Dharwar.

(Office foil of Consignor.)

Credit Note No. ________ Dated ________

No. of Receipt and Delivery Vouchers for Stores. ________

Ry. Receipt No. ________ Dated ________

No. of vehicles required (as per detail specified on reverse). ________

For conveyance of ________

From ________

To ________

Via ________

by ________ Train.

Sender's name ________

Official designation ________

Address ________

Consignee's name ________

Official designation ________

Address ________

No. of Articles ________

DESCRIPTION—

Marks ________

Actual weight ________ Maunds ________ Seers.

Weight charged ________ Maunds ________ Seers.

Class ________

Rate per maund ________

Amount Rs. ________ As.—

(TO BE SENT TO AUDIT)

**

Credit Note No. ________, dated ________ 190 .

STAMP OF ISSUING DEPARTMENT.

________ Circle.

For conveyance by Goods / Mixed / Passenger / Mail ‡‡ train of the undermentioned stores from ________

to ________ *via* * ________ at ________ Risk †

Railway Receipt No. †† ________, Way Bill / Invoice No. †† ________ dated †† ________ 19 .

Sender's name, Official designation and address ________

Consignee's name, Official designation and address § ________

No. of articles.	Description of Goods or Parcels ‖	Marks.	Class **	No. of vehicles required (as per detail specified on reverse)	Weight: Actual. Mds.	Weight: Actual. Srs.	Weight: Charged ‡‡ Mds.	Weight: Charged ‡‡ Srs.	________ Ry.: Rate ‡‡	________ Ry.: Freight ‡‡ Rs.	________ Ry.: Freight ‡‡ As.	________ Ry.: Rate ‡‡	________ Ry.: Freight ‡‡ Rs.	________ Ry.: Freight ‡‡ As.	Total Amount: Paid ‡‡ Rs.	Total Amount: Paid ‡‡ As.	Total Amount: To Pay ‡‡ Rs.	Total Amount: To Pay ‡‡ As.

Pay to the ________ Railway Company the sum of Rupees ________

________ as particularized above.

________ *Signature of Despatching Officer, or his Agent.*

________ *Station.*

________ *Official Designation.*

Date ________ 190 .

** If issued on account of any expedition or special service the name of the same is to be stamped or written in red at the head of the form.

‡‡ Alternative entries not required should be scored through.

* When a consignment is despatched by other than the cheapest route, the route should be specified and the entry initialled by the Despatching Officer.

† Here state whether at "Owner's" or "Railway" risk.

†† These entries must be made by the Railway.

§ Whenever a 'To Pay' consignment is re-booked to another station, the Official re-booking the same should pay the freight charges by Credit Note, the fresh despatch being treated as an entirely new transaction.

‖ Small arms ammunition should be described as "safety" or otherwise.

(TO BE RETAINED AT STATION.)

Forwarding note connected with

Credit Note No. ________, dated ________ 190 .

STAMP OF ISSUING DEPARTMENT.

To

STATION MASTER,

____

By whom consigned ________

To whom consigned ________

Station to and address ________

Number of Articles ________

Description and Marks ________

Sender's weight ________ Mds. ________ Srs.

†† Weight charged ________ Mds. ________ Srs.

†† Class ________

†† Rate ________

†† Way Bill / Invoice No. ________

†† Receipt No. ________ date ________

†† No. of vehicles provided (as per detail specified on reverse.)

†† Proportion of freight due to each Ry. ________

Please receive the above Goods / Parcels and forward by ________ Train

to ________ *via** ________ at ________ Risk †

subject to the conditions in force in regard to consignments of Goods / Parcels.

Sender of Goods ________

Official Designation ________

Station ________

Date ________ 190 .

* When a consignment is despatched by other than the cheapest route, the route should be specified and the entry initialled by the despatching officer.

† Here state whether at "Owner's" or "Railway" risk.

†† These entries must be made by the Railway.

NOTE.—When the Credit Note is tendered at the receiving station this portion of the form should be torn off before presenting the Credit Note.

Description, number and carrying capacity of vehicles to be provided by the despatching railway.

Description.	Number.	*Carrying Capacity.
4 wheeled vehicles, broad gauge		
Bogie " " "		
4 wheeled " metre and narrow gauge		
6 " " " " " "		
Bogie " " " " "		

* This information is required for audit purposes. The figures should be filled in by the railway, and be verified by the despatching officer before the stores are despatched.

Signature of Despatching Officer,
or his Agent.

Description, number and carrying capacity of vehicles provided by the despatching railway.

Description.	Number.	*Carrying Capacity.
4 wheeled vehicles, broad gauge		
Bogie " " "		
4 wheeled " metre and narrow gauge		
6 " " " " " "		
Bogie " " " " "		

* This information is required for audit purposes. The figures should be filled in by the railway, and be verified by the despatching officer before the stores are despatched.

Signature of Despatching Officer,
or his Agent.

Government of Madras.

PUBLIC WORKS DEPARTMENT.

(RAILWAY).

Recd.	1908.	*Enclosures*
Regd.		*Spare copies*

G.O., No. 270 Ry., 15th July 1908.

Panruti-Trichinopoly Chord Railway.

Recording a letter from the Railway Board stating that they have already expressed the opinion that the — will form part of an important main route and that it should be built to the standard of a main line.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT

(RAILWAY).

Read—the following papers :—

I

G.O., No. 52 Ry., dated 9th January 1907.

Abstract.—Communicating to the Agent, South Indian Railway, a letter from the Railway Board stating that the detailed survey of the Trichinopoly-Tirukkoyilur line may be put in hand and asking for the early submission of the estimates of the cost of the survey and an application for the funds required in the current official year.

II

Letter—from Mr. Neville Priestley, Agent, South Indian Railway.
To—the Consulting Engineer for Railways, Madras.
Dated—Trichinopoly, the 18th January 1907.
No.—A.C. 1952/1/28.

In confirming my wire of 14th January 1907 as follows—

"G.O., 52 Ry., 9th instant. Please obtain allotment twenty thousand rupees "current official year, Trichinopoly-Tirukkoyilur survey",

I have the honour to submit in detail an estimate for the survey of the Trichinopoly-Tirukkoyilur Railway, and a copy of my letter of instructions to the Chief Engineer.

Enclosure.

Letter—from Mr. Neville Priestley, Agent, South Indian Railway.
To—the Chief Engineer, Trichinopoly.
Dated—the 17th January 1907.
No.—A.C. 1952/1.

In continuation of my No. A.C. 1952/1 of the 8th January 1907, I shall be glad, if you will take steps, to make a final survey of the Trichinopoly-Tirukkoyilur Railway without delay.

2. In making the survey, a route should be selected which will serve the greatest number of towns and villages with large populations, even though this may involve a certain amount of zigzagging. The object to be attained is to give railway communication to the largest number in the area to be traversed.

3. Although the survey has been sanctioned for a line to Tirukkoyilur, this does not limit you to making that the terminus if Villupuram or elsewhere is proved more suitable.

4. In making the survey and in preparing the estimates you will bear in mind that the essential condition is not the provision of a high standard chord for the shortening of distance between the termini but the opening up of the country by a line of railway; and that the less money is spent on this line the more there will be available for other lines in the Presidency.

5. Subject to paragraph 2 therefore you will survey for the lightest possible standard *consistent with safety* and suitable for a speed averaging fifteen miles an hour between stations and not exceeding twenty miles an hour at any time. Bridges, tunnels, culverts and such works should be of the standard prescribed for metre gauge railways in the rules issued by the Railway Board in their orders of 1903 and, except where special circumstances demand otherwise, you should

(*a*) omit fencing altogether,

(*b*) limit the number of signals to one stop signal on either side of a station, and, in the case of lines on which the running of trains is restricted to hours of daylight, to omit signals altogether (see section 45 (*d*) of the General rules promulgated with Railway Board's letter No. R.T. 163-B./2 of the 26th September 1906),

(*c*) omit the interlocking of stations,

(*d*) lay the road with 36 lb. rails, 24 feet long on wooden sleepers 9 to a rail,

(*e*) provide only the minimum quantity of ballast necessary for safe running at the speeds prescribed,

(*f*) provide platforms only up to rail level,

(*g*) provide sidings at crossing places of such length only as may be necessary for the crossing of such trains as may be run, but not exceeding 1,200 feet in length,

(*h*) provide only mat huts for station buildings and staff quarters,

(*i*) to omit turn-tables and to work trains, where this may be deemed expedient, with engines running tender foremost.

A supplementary estimate should also be submitted to show what it would cost under the several heads to bring the road up to main line standard.

You will of course consult me from time to time as to the route to be followed and in regard to any other details about which you may require instructions.

III

Letter—from Mr. Neville Priestley, Agent, South Indian Railway.
To—the Consulting Engineer for Railways, Madras.
Dated—the 23rd January 1907.
No.—A.C./1952-1/35.

With my letter No. A.C. 1952/1/28 of the 18th instant, I sent you a copy of the instructions I issued to the Chief Engineer for the preparation of the survey for a railway from Trichinopoly to Tirukkoyilur or Villupuram.

2. Since then I have had completed and now send you a map showing the population of the area lying between a line running from Trichinopoly to Tirukkoyilur and the existing line *viâ* Cuddalore and Tanjore.

3. The squares represent strips of country ten miles by ten miles and the red ink figures in each square represent the population per square mile in that square, as ascertained from the last Census Report.

4. You will notice that the proposed line from Trichinopoly to Tirukkoyilur will pass through the most scantily populated tracts in the whole area and that the most densely populated tracts will still continue without railway communication.

5. In constructing a railway in this area the object would seem to be—

First to open out country which is at present without railway communication and that consequently no consideration should be allowed to questions of shortening distances between termini ; and

Secondly to afford railway communication to the greatest number and consequently to obtain the best return on the outlay.

6. In regard to the first point, assuming that the shortening of distance between the termini was a desideratum, the new route could not be more than 54 miles shorter than the existing route ; but unless the new route was built up to the standard of the existing route, there could be no saving of time. To build the new line up to the

standard of the main line would involve heavy outlay, and I assume that it is not high class lines the Madras Government desire, but that the available money should be spread over as large an area as possible so as to give the benefits of railway communication to as great a number as possible. Once the idea of a line which will shorten distance so as to permit of acceleration of time on the journey between termini is abandoned, there is no object in building anything but a surface line and so keeping down outlay until the business developes sufficiently to justify a higher standard. If this view is accepted, perhaps Government will approve of my instructions to the Chief Engineer.

7. In regard to the second point the map shows that the most densely populated part of the area under consideration lies to the east of the proposed line from Trichinopoly to Tirukkoyilur, and that a line which is likely to yield the largest return on the outlay should run from Trichinopoly to Panruti *viâ* Vriddachalam. The length of this line would be 90 miles as compared with $138\frac{1}{2}$ miles by the existing line and it would save one expensive bridge with cause ways, costing about two lakhs, and would dispense with the necessity for a direct line from Cuddalore to Vriddachalam.

8. Three alternative routes are shown on the map marked 1, 2 and 3. Of these only No. 3 avoids the bridge referred to: 1 and 2 would, therefore, be more expensive to construct and would require a larger outlay.

9. The distances between Trichinopoly and Villupuram by the several routes are as follows:—

Route to be followed.	Mileage to be constructed.	Distance between Trichinopoly Junction and Villupuram.	
		Via new route.	*Via* existing route.
1. *Via* Tirukkoyilur	96	116	$150\frac{1}{2}$
2. Direct to Villupuram	96	96	$150\frac{1}{2}$
3. *Via* Adiyur and Panruti	93	105	$150\frac{1}{2}$
4. ,, Vriddachalam and Panurti ..	90	102	$150\frac{1}{2}$

If route 4 is adopted, the distance from Cuddalore to Vriddachalam will be 34 miles by a direct line and 40 miles *viâ* Panruti. The necessity for a direct line will, therefore, cease to exist for the present at all events, if route 4 is adopted. If either of the other routes is decided upon, the direct line from Cuddalore to Vriddachalam will require to be made in addition, and an extra 34 miles will require to be added to the column "Mileage to be constructed" in the preceding table.

10. Of the four routes referred to, I would recommend the adoption of route 4, namely, *viâ* Vriddachalam to Panruti. It will save *40 miles of actual construction and will consequently permit of just that much more mileage being constructed than would be possible if route 1 were adopted; and it will traverse the most densely populated area and so give the benefits of railway communication to the greatest number and yield the largest return on the outlay.

	MILES.
*On main route	6
Vriddachalam to Cuddalore ...	34
Total ...	40

11. Pending the decision of Government as to the route they desire followed, I have, as personally arranged with you, directed a reconnaissance to be made of this route and I shall be glad of the early orders of Government as to

(*a*) the route to be followed,
(*b*) the character of the line to be estimated for.

IV

G.O., No. 181 Ry., dated 28th January 1907.

Abstract.—Forwarding to the Railway Board an estimate, amounting to Rs. 44,028, of the cost of a detailed survey for a line of railway from Trichinopoly to Tirukkoyilur.

V

Letter—from Mr. G. A. Anderson, Secretary to the Govt. of Madras, P.W.D., Railway.

To—the Secretary to the Railway Board, Calcutta.

Dated—the 18th February 1907.

No.—329 Ry.

With reference to correspondence on the subject of the Trichinopoly-Tirukkoyilur Railway ending with my letter No. 181 Ry., dated 28th January 1907, with which an estimate, amounting to Rs. 44,028, for the cost of the sanctioned survey of this line was forwarded, I am directed to forward, for the consideration and orders of the Railway Board, copies of the papers noted in the margin dealing with the questions of the alignment to be followed and the standard to which the Railway should be constructed.

(1) Letter No. A. C. 1952–1/35, dated January 23, 1907, from the Agent, South Indian Railway.
(2) Map enclosed with the above letter (to be returned).
(3) Agent's letter of instructions to his Chief Engineer, dated January 17, 1907.
(4) Note, dated February 6, 1907, by the Consulting Engineer for Railways, Madras.

2. With regard to the alignment I am to say that both for the general reasons stated in paragraphs 6 to 10 of the note by the Consulting Engineer for Railways, Madras, and in the interests of the South Arcot district, His Excellency the Governor in Council has no hesitation in recommending the alignment northwards from Trichinopoly *viâ* Srirangam, Tiruppattur, Perambalur, Volcondah, Parlore and Adiyur to Panruti.

3. As regards the standard to which this chord line should be constructed, I am directed to say that His Excellency the Governor in Council is in agreement with the Consulting Engineer for Railways, Madras, and considers that for the reasons stated by that officer the standard, if the line is to be constructed on the metre gauge, should be that indicated in paragraph 12 of his note.

4. This Government I am to say are aware that the question of gauge being still under consideration it may not be possible to at once decide upon the standard to which the estimates should be prepared. The settlement of the standard of construction is however of less immediate importance than the selection of the route to be followed, as pending orders for the alignment the survey party ready in the field can only be engaged on reconnaissance work much of which may prove futile, and it is desirable that they should turn their attention to the final location of the line as early as possible on the working season. As pointed out in letter No. 1859 Ry., dated the 22nd November 1906, the country to be traversed on any alignment that may be chosen is adaptable to broad gauge curvature and consequently the question of gauge need not enter into the consideration of the route to be followed, His Excellency the Governor in Council therefore trusts that early orders on this point may be passed.

Enclosure.

Note by Mr. G. A. Anderson, Consulting Engineer for Railways, Madras, dated 6th February 1907.

A reconnaissance of the Trichinopoly-Tirukkoyilur line has been made. The Railway Board have now sanctioned the detailed survey and the Agent, South Indian Railway, asks for instructions regarding the alignment to be followed (see the map he submits).

2. The line was originally proposed as a famine protective one which would also have the merit of shortening the route by the South Indian Railway from Madras to Trichinopoly and the south. Mr. Spring dealt with the project in his note of December 14, 1898, in which he treated it as an *alternative* to the proposed east and west line from Salem through Attur to Porto Novo and preferred it to that line for

famine protective purposes. It is not necessary to enter into any such comparison of the two lines now. The north and south line between Trichinopoly at the south end and some point on the existing South Indian Railway between Tirukkoyilúr and Panruti is an accepted Imperial project, and all we have to do now is to fix its general alignment leaving the question of cross branches for subsequent consideration.

3. It is natural that the South Indian Railway Company should be anxious to construct the line on the most paying alignment and to the cheapest possible standard, but the point of view of Government is not quite the same as that of the Company and what Government should aim at is a "foundation" line that will offer the best facilities for opening up the rough parallellogram of country bounded by the South Indian Railway on the north, east and south and the Shevaroy Hills on the west, without unduly losing its character as a chord line on an important through route.

4. Alignments Nos. 1 and 4 on the Agent's map may be taken as the outside limits to be considered. No. 1 on the west not only divides the parallellogram fairly evenly but to go further west is to get into sparsely populated and hilly country, giving a higher cost and lower receipts for any north and south line and which is more suited to east and west branch line development. No. 4 on the east lies for all its length within 30 miles of the existing South Indian Railway, *i.e.*, but for the Coleroon river, within its sphere of influence.

5. Dealing first with No. 4, Panruti-Vriddhachalam-Trichinopoly, the advantages claimed for it by the Agent are—

(i) Shorter in itself by 3 to 6 miles than any other of the routes proposed and giving the shortest chord line but one to the through route.

(ii) Traverses the most densely populated country and so will yield the best return and benefit the greatest number.

(iii) Will render the Cuddalore-Vriddháchalam line unnecessary and so save 34 miles of construction.

(iv) Will save the bridging of the Ponniar river (estimated at 4½ lakhs).

6. I think the advantages claimed are overestimated. Any north and south line must necessarily be only a backbone to which ribs of east and west development will in due course be added. Whatever may be saved now therefore in cross lines must be incurred later and as it must be some time before funds allow of the cross lines being constructed, the backbone should be laid so as to give the earliest possible benefit to the maximum *area of country* and not necessarily to the maximum *number of people*. In this respect the alignment—never more than 30 miles from the existing line—fails and on this account it should, I think, be rejected.

7. From Trichinopoly to the Vellar river at Palur the alignment laid down on the map is common to routes 1, 2 and 3. It passes through Srírangam, Tiruppattúr, Perambalúr and Volcondah, in the alignment proposed by Mr. Spring in his note of December 14, 1898 (paragraph 13) and approved by the Chamber of Commerce, Madras, the Board of Revenue and the Collector of Trichinopoly and is that followed by the reconnaissance survey of 1899–1900. The south 10 and the north 20 miles pass through country populated about 350 to the square mile, only 12 miles or so are through sparse population. This alignment divides the parallellogram reasonably and satisfies the conditions required of the backbone.

8. With regard to the alignment north of the Vellar river, No. 1 represents Mr. Spring's proposal *viâ* Chinna Salem and Kallakurchi to Tirukkoyilur. The Collector of South Arcot has objected to that part of the alignment from Kallakurchi to the terminus at Tirukkoyilur as passing through 24 miles of sparse population, jungle and forest reserve, and going too far west to appreciably influence the development of the cotton trade of the eastern and western parts of the Vriddhachalam taluk and has suggested an alternative route 41 miles in length (or 17 longer than Mr. Spring's) from Kallakurchi to Panruti. To this Mr. Spring replies that with his alignment there will not be a village in that region more than 25 miles from a railway and that if anything better than this is wanted it should be met by District Light Railways. In my opinion, Mr. Spring has the best of the argument and, if the through

north and south route were not to be considered, I should say his alignment was as well placed as any. We have, however, a double object in view for the "backbone" and bearing in mind that the development of a country should be by lines directed towards natural outlets, and that in this case this direction corresponds with the cheapest construction along the drainage of the country, the verdict must, I think, be in favour of saving 11 to 20 miles in the through route by deflecting the alignment north of the Vellar river either to Villupuram or Panruti. Such a detour as is proposed by the Collector of South Arcot is out of the question. It comes under the category of "cross lines."

9. The next question is where should the terminus be—at Villupuram or at Panruti? Route No. 2 to Villupuram has the advantage of shortening the through route by 9 miles more than No. 3, the alignment to Panruti, but No. 3, while serving practically the same country, has the advantage of passing through a slightly more populous district and saving 3 miles of construction as well as much expensive bridging of the Ponniar river and its spills. The money so saved would make 20 miles of cross lines. In my opinion, the alignment selected north of the Vellar river should be No. 3 *viâ* Adiyur and Panruti.

10. The alignment I recommend therefore on its own merits is by way of Trichinopoly, Srirangam, Tiruppattur, Perambalur, Volcondah, Parlore, Adiyur, Panruti. It also has the advantage of corresponding with that recommended by the Railway Commission appointed in 1903 to consider the question of the best means of effecting broad gauge connection between the Indian system of broad gauge railways and Ceylon. At the end of paragraph 6 (ii) of their report, the Commissioners after recommending that the route should follow a line roughly drawn between Trichinopoly and Tirukkoyilur found themselves for want of sufficient information unable to decide where the northern terminal of the chord should be between the limiting points of Tirukkoyilur and Panruti, and I think there can be no doubt that had the evidence then before them decided them upon Panruti as the northern objective they would have left Chinna Salem to be served by the projected cross line from Salem through Attur to Vriddhachalam and have laid down an alignment *viâ* Adiyur for the north and south line between Parlore on the Vellar river and Panruti. We have recently been informed by the Railway Board that the question of broad gauge connection between India and Ceylon is still an open one. In case therefore the broad gauge wins the day now or in future years it is as well if the alignment we consider the best on its own merits is also the one recommended for broad gauge construction.

11. There are two other points to be considered:—

(i) The standard to which this chord line should be constructed if it is made metre gauge, and

(ii) What use can be made of the Survey staff pending a decision on the alignment to be followed? The Agent, when submitting his estimates on January 18 for the final survey of this line, has informed me of certain detailed instructions which he has given to his Chief Engineer. Not only has he ordered a survey to suit the Company's interests in the manner which he now submits for consideration, but he has taken upon himself to ordain the standard to which the line is to be constructed, and to order the "*lightest possible standard consistent with safety and suitable for a speed* "*averaging 15 miles an hour between stations and not exceeding 20 miles an hour at any* "*time*". Safety appliances and fencing to be omitted, the very minimum accommodation to be given at stations, the bridges to be up to metre gauge standard and the permanent way to be of light 36 lb. rails. It is hardly necessary to point out that the line is an Imperial one and that these orders are entirely unauthorised. Even were the question of the broad gauge Indo-Ceylon Railway settled the orders of the Railway Board would have to be obtained on the standard to be adopted. By their contract with the Secretary of State the latter is the sole authority on "standard" and "equipment".

12. And I cannot agree with the Agent's views. It is true that branches constructed by the South Indian Railway in the past have cost an undue amount and that the Company have failed to realise the meaning of a "light railway" on the parent

gauge and that where such light branches are required I have not only expressed sympathy with the Agent in desiring to keep down the cost, developing only as traffic develops, but have urged this policy upon him. But he should realise the essential difference between District Board Railways and small branches to open up interstices in railway communication, and a chord line of a through mail route destined—whatever gauge may be decided on—to absorb the through South Indian and Indo-Ceylon traffic almost as soon as made; and in my opinion there can be no question that the line—if metre gauge—should be constructed to the fullest metre gauge standard of solidity and dimensions with the Company's standard 50 lb. rails at least (personally I would advocate a 60-lb. rail. This has been adopted on the Southern Mahratta Railway mail route with a far lighter traffic than that on the South Indian Railway) bridges up to 1903 metre gauge standard *plus* 20 per cent. to allow of 12-ton axle loads, and up to date signalling as prescribed in the new General Rules of 1906. Fencing should also be provided for and station yards should comprise sufficient traffic and locomotive accommodation to ensure safe and expeditious handling of the traffic. The only items of construction that should be left for subsequent development should be such buildings and structures as do not immediately affect the safety, economy and despatch of the service.

13. The fact that for want of funds the projected chord line south of Trichinopoly through Pudukkottai to Ramnad (or Paramakudi) may in the first instance have to be made to a lighter standard should not in my opinion affect the standard of the chord between Trichinopoly and Panruti. The latter is an Imperial undertaking whose future as part of a trunk route is too positively assured to admit of the construction suitable for a branch, and nothing but waste and dislocation of traffic can ensue if money is grudged on its initial construction to a standard suitable for its duty.

14. From Madras to Panruti the existing line is a 50-lb. standard road with the smaller span bridges strengthened up to broad gauge standard *plus* 25 per cent. and the larger bridges still remaining to be strengthened should be brought up to full metre-gauge *plus* 20 per cent. unless broad gauge is decided on. Signalling and interlocking on this section is under improvement to bring it up to a proper main line standard. The road by the existing circuitous South Indian Railway line south of Trichinopoly *viâ* Dindigul, Madura and Ramnad is all of standard 50 lb. rails on cast iron pots, the bridges are now all up to full metre gauge standard—some of them indeed have recently been converted to broad gauge standard *plus* 25 per cent.—the signalling and interlocking Trichinopoly to Madura is now being attended to with a view to improvement, while on the Madura-Mandapam section all stations are fully interlocked and trapped. Even therefore if the Trichinopoly-Pudukkottai-Ramnad (or Paramakudi) chord must of necessity remain for years on a branch line standard the existing main line from Trichinopoly south, though somewhat circuitous is available as part of a through route of full capacity and to interpolate anywhere above it a weak section of branch line standard would to my mind be inexcusable.

15. As to how the services of the survey staff can best be utilised pending a decision as to the alignment and standard. In discussing the subject with the Agent on the 22nd January—the discussion led to his letter of the 23rd under consideration—I authorised him to make a reconnaissance of route No. 4 between Panruti and Vriddhachalam so as to prevent the disbandment of the staff collected; but after giving the subject fuller consideration and in the belief that this Government will agree with me that route 3 is the one to be selected I directed him verbally on the 3rd instant to reconnoitre along this route between Panruti and Adiyur.

VI

G.O., No. 348 Ry., dated 20th February 1907.

ABSTRACT.—Communicating to the Agent, South Indian Railway, a letter from the Railway Board sanctioning the estimate, amounting to Rs. 44,028, of the cost of a detailed survey for a line of railway from Trichinopoly to Tirukkoyilur.

VII

Letter—from Mr. G. A. Anderson, Consulting Engineer for Railways, Madras.
To—the Agent, South Indian Railway.
Dated—the 25th February 1907.
No.—387 M.

In continuation of G.O., No. 348 Ry., dated the 20th February 1907, I have the honour to inform you that the question of the alignment to be followed has been referred to the Railway Board and to request you pending their decision to confine operations to a reconnaissance between Panruti and Adiyur as verbally intimated to you by me on the 3rd February 1907.

VIII

Letter—from Mr. R. C. F. Volkers, Secretary, Railway Board.
To—the Secretary to the Govt. of Madras, P.W.D., Railway Branch.
Dated—the 9th March 1907.
No.—R.C. 386 G./4.

In reply to your letter No. 329 Ry., dated the 18th February 1907, I am directed to say that the Railway Board accept the recommendation of His Excellency the Governor in Council that the alignment of the proposed Trichinopoly-Tirukkoyilur Railway northwards from Trichinopoly should run *viâ* Srirangam, Tiruppattur, Perambalur, Volcondah, Parlore and Adiyur to Panruti, on the understanding that the alignment will be adapted to the requirements of either the broad or the metre gauge.

2. I am also to say that the Railway Board approve of the project for the line being prepared on the standard indicated in paragraph 12 of the note, dated 6th February 1907, by the Consulting Engineer for Railways, Madras, attached to your letter.

IX

Telegram—from Mr. Neville Pristley, Agent, South Indian Railway.
To—the Consulting Engineer for Railways, Madras.
Dated—the 14th March 1907.
No.—A.C. 1952-4.

Your letter 387 M., 25th February. Can orders of Government be communicated early regarding Trichinopoly-Tirukkoyilur survey as reconnaissance survey will be complete within about a fortnight, and we shall then have no work for staff collected for survey.

X

Telegram—from Mr. G. A. Anderson, Consulting Engineer for Railways, Madras.
To—the Agent, South Indian Railway.
Dated—the 14th March 1907.
No.—43 D.

Railway Board order alignment of Trichinopoly-Tirukkoyilur Railway to run *viâ* Srirangam, Tiruppattur, Perambalur, Volcondah, Parlore and Adiyur to Panruti. Alignment will be adapted to either broad or metre gauge. Letter follows.

XI

Letter—from Mr. G. A. Anderson, Consulting Engineer for Railways, Madras.
To—the Agent, South Indian Railway.
Dated—the 25th March 1907.
No.—598-M.

In continuation of my No. 563, Routine,* dated 14th March 1907, I have the honour to inform you that the Railway Board direct that the alignment of the proposed Trichinopoly-Tirukkoyilur Railway should run northwards from Trichinopoly *viâ* Srirangam, Tiruppattur, Perambalur,

* Post copy of telegram No. 43-D., dated 14th March 1907, to the Agent.

Volcondah, Parlore and Adiyur to Panruti on the understanding that the alignment will be adapted to the requirements of either the broad or the metre gauge.

2. The Railway Board further direct that the project for this railway shall be prepared on the following standard :—

(i) Full metre gauge standard dimensions.

(ii) Permanent way to be of the South Indian Railway standard 50 lb. rails on cast-iron pot sleepers.

(iii) Bridges up to 1903 metre-gauge standard *plus* 20 per cent.

(iv) Up to date signalling as prescribed in the new General Rules of 1906.

(v) Fencing to be provided throughout.

(vi) Station yards to comprise sufficient traffic and locomotive accommodation to ensure safe and expeditious handling of the traffic.

(vii) The only items of construction that should be left for subsequent development are such buildings and structures as do not immediately affect the safety, economy and despatch of the service.

XII

Letter—from Mr. F. D. Fowler, Secretary to the Govt. of Madras, P.W.D., (Railway).
To—the Agent, South Indian Railway.
Dated—the 1st May 1908.
No.—12 R. M./O.

With reference to letter from the Consulting Engineer for Railways, Madras, No. 598 M., dated 25th March 1907, I am directed to enquire what is the state of the project and to ask if you can kindly furnish this Government with a rough plan showing the actual location of the Trichinopoly-Panruti line.

XIII

Letter—from Mr. Neville Priestley, Agent, South Indian Railway.
To—the Secretary to Government, Public Works Department (Railway).
Dated—the 6th May 1908.
No.—A.C. 1952/10.

In reply to your letter No. 12 R. M./O. of the 1st instant, I have the honour to inform you that I hope to be able to send you the report on this project in a few days more when I will send you a plan showing the location of the line.

XIV

Letter—from Mr. Neville Priestley, Agent, South Indian Railway.
To—the Secretary to Government, Public Works Department (Railway).
Dated—the 13th May 1908.
No.—A.C. 1952-11/30.

With reference to letter No. 598 M. of the 25th March 1907 from the late Consulting Engineer, I beg to enclose, for the information of the Madras Government, a copy of my letter No. A.C. 1952–11/29 of 13th May 1908 to the Railway Board and six copies of the report and estimate of the Trichinopoly-Panruti survey together with a set of index plans and sections.

Enclosure No. 1.

Letter—from Mr. Neville Priestley, Agent, South Indian Railway.
To—the Secretary, Railway Board, Simla.
Dated—the 13th May 1908.
No.—A.C. 1952/11/29.

In letter No. 598 M. of the 25th March 1907 (copy enclosed) from the late Consulting Engineer for Railways, Madras, I was requested to prepare a project for a railway from Trichinopoly to Villupuram *viâ* Panruti on the lines therein indicated.

2. I now beg to submit, for the information of the Railway Board, a copy of the report and estimate.

3. It will be seen that the Railway as designed, that is in accordance with the instructions of the Railway Board, is estimated to cost Rs. 1,07,34,012 or Rs. 1,13,239 per mile, and the items which go to swell the estimate are—

	Total.	Per mile.
	Rs.	Rs.
(a) Bridges ...	23,13,089	24,402
(b) Permanent-way ...	28,86,401	30,450
(c) Rolling-stock ...	21,48,020	22,661
To which may be added—		
(d) Fencing ...	4,53,432	4,783
(e) Earthwork ...	7,16,219	7,556
(f) Stations and buildings ...	7,09,224	7,482

4. The distance by the existing line *viâ* Mayavaram and Tanjore between Villupuram and Trichinopoly junction is $150\frac{1}{2}$ miles. The distance by the proposed line will be $108\frac{1}{4}$ miles, so that the new route will save $42\frac{1}{4}$ miles in distance and at the most $1\frac{1}{2}$ hours in time.

5. The question, therefore, would seem to be whether this small advantage justifies the construction of a high class railway, or whether the circumstances of the case would not be equally well met by a light grade railway to be improved as business develops.

6. The object in view, I take it, is not the shortening of the distance between Villupuram and Trichinopoly junction but the opening up of a somewhat thickly populated tract of country lying to the west of the South Indian Railway and which is at present altogether destitute of railway communication. This area has at present to be contented with somewhat primitive methods of transport at low rates of speed and would be greatly benefited by any improvement on these methods. For the improvement of its resources, it does not need to jump straight away from a bullock bandy travelling 15 or 20 miles a day to express trains travelling 30 miles an hour.

7. The cost of constructing the line must in any case be high because of the three large bridges, but much might be done to reduce expenditure without in any way impairing the usefulness of the line, if too high a standard is not demanded in the first instance.

8. To shew what might be done in this direction, I have had an alternative estimate prepared for a light grade line, which I submit herewith for consideration, and about which I should like to offer the following remarks :—

(a) *Bridges.*—I do not know what led the Railway Board recently to increase the standard of metre gauge bridges. The old standard was generally recognised as high enough and it is for such a standard that the alternative estimate provides.

(b) *Permanent-way.*—The suggestion of 36 lb. rails sounds somewhat revolutionary but the Jodhpur-Bikanere Railway which affords a short cut between Rajputana and Hyderabad (Sindh) and Rajputana and the Punjab started with rails of that weight some twenty years ago and still uses them and the result of their not being too ambitious and not burdening capital uselessly has been that they have been able to earn a suitable return on their outlay much sooner than they could otherwise have done.

(c) *Rolling-stock.*—This item cannot be reduced as the South Indian Railway is already very short of rolling-stock.

(d) *Fencing.*—If light rails are provided, low speeds will be necessary and the fencing of the line will be an avoidable luxury.

(e) *Earthwork.*—For a line which is intended to open up country and not to be used as a short circuiting line, all that is needed in the first instance is a surface line, so as to keep the capital cost as low as possible.

(*f*) *Stations and Buildings.*—Regulation platforms are not needed. If rail level platforms are sufficient on the continent of Europe and in America for broad gauge lines, they should be amply sufficient for metre gauge lines. Nor are buildings required of a permanent character. All that is really *needed* is *shelters.* Nor again is an up to date system of signalling required. With trains travelling at low speeds no more is needed than the methods of signalling which have been in use all over India for years and which are only now required to be improved to meet a largely increased train service at high rates of speed.

9. The adoption of the alternative estimate would result in a saving of Rupees 22,60,710 or Rs. 23,848 a mile, making the total cost of the railway Rs. 84,73,302 or Rs. 89,391 a mile.

10. Considering how very difficult it has become to obtain any funds for new lines of railway, it would seem to be wiser policy to make such money as does become available, construct as many miles of "railed roads" or "feeder lines" as possible, rather than to utilise it in constructing a much fewer number of miles decked out in what, in the circumstances, must be regarded as furbelows and frills. With the evidence of the Madura-Pamban and Travancore branches before them, I think Government should pause and consider whether any good has come to the country from these high grade lines and whether the extra money wasted on them might not have been more profitably spent in building more lines of railway.

11. In conclusion, I beg to inform you that copies of this letter and the report have been submitted to the Madras Government.

Enclosure No. 2.

SOUTH INDIAN RAILWAY COMPANY, LIMITED.

Comparative statement showing the estimate of cost of Panruti–Trichinopoly Chord Railway prepared as per requirements (1) of the Railway Board and (2) the Agent, South Indian Railway.

Length 94·79 miles.

Heads of account.	Total cost in rupees as per requirements of Railway Board.				Total cost in rupees as per requirements of Agent, South Indian Railway.				Difference (reduction).				Remarks.
	Sub-heads.		Main heads.		Sub-heads.		Main heads.		Sub-heads.		Main heads.		
	Total cost.	Rate per mile.	Total cost.	Rate per mile.	Total cost.	Rate per mile.	Total cost.	Rate per mile.	Total cost.	Rate per mile.	Total cost.	Rate per mile.	
	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	
I. Preliminary expenses ..	..	..	72,738	767	..	..	72,738	767	..	..	..	..	No reduction made.
(a) Survey expenses ..	9,305	98	..	..	9,305	98	..	..	..	..	..	..	
(b) Plant	8,051	85	..	..	8,051	85	..	..	..	..	..	..	
(c) Establishment	55,382	584	..	..	55,382	584	..	..	..	..	..	..	
II. Land	5,12,339	5,405	5,12,339	5,405	5,12,339	5,405	5,12,339	5,405	..	..	..	..	
III. Formation	..	..	7,16,219	7,556	..	.	5,87,914	6,202	..	..	1,28,305	1,354	Reduction due to grading line as a surface line. Grades 1 in 100.
(a) Earthwork	7,16,219	7,556	..	..	5,87,914	6,202	..	..	1,28,305	1,354	..	..	
IV. Bridgework	..	..	28,13,089	24,402	..	.	21,56,855	22,754	..	..	1,56,234	1,648	Reduction due to adopting standard metre gauge girders instead of girders 25 per cent. stronger.
(a) Major bridges	18,56,621	19,587	..	..	17,06,662	18,005	..	..	1,49,959	1,582	..	..	
(b) Minor bridges	4,56,468	4,815	..	..	4,50,193	4,749	..	..	6,275	66	..	..	
V. Fencing, etc.	..	..	4,53,432	4,783	..	.	1,28,403	1,355	..	..	3,25,029	3,428	Reduction due to providing fencing for important stations only. The project estimate provides for wire fencing throughout.
(a) Fencing	3,33,996	3,523	..	.	8,967	95	..	..	3,25,029	3,428	..	..	
(b) Road crossings	1,13,303	1,195	..	..	1,13,303	1,195	..	..	..	..	..	..	
(c) Mile and gradient posts.	6,133	65	..	..	6,133	65	..	..	..	..	..	..	
VI. Electric telegraph	12,411	131	12,411	131	12,411	131	12,411	131	..	..	..	..	No reduction made.
VII. Ballast and Permanent-way.	..	..	28,86,401	30,450	..	..	16,10,534	16,991	..	..	12,75,867	13,459	Reduction in section of ballast; formation 1′ 1½″ below rail level instead of 1′ 6″; rails 36 lb. per yard on wooden sleepers in place of 50 lbs. rail and pot road.
(a) Ballast	2,42,171	2,555	..	..	1,74,135	1,837	..	..	68,036	718	..	..	
(b) Permanent-way ..	26,44,230	27,895	..	..	14,36,399	15,154	..	..	12,07,831	12,741	..	..	
VIII. Stations and buildings ..	..	..	7,09,224	7,482	..	..	3,48,130	3,673	..	..	3,61,094	3,809	Flush platforms and wire platform fencing in place of raised platforms and steel pale fence. Neat station buildings except at important stations where small pukka buildings capable of extension provided for. Quarters for Native station staff only provided for all Kutcha-quarters except Station Masters' quarters at important stations. Gangmen's quarters included.
(a) Stations and offices ..	2,46,592	2,601	..	..	95,498	1,008	..	..	1,51,094	1,593	..	..	
(b) Workshops and stores.	..	..	..	..	..	..	..	..	..	..	..	..	
(c) Staff-quarters	1,59,495	1,683	..	..	99,200	1,046	..	..	60,295	637	..	..	
(d) Station machinery ..	3,03,137	3,198	..	..	1,53,432	1,619	..	..	1,49,705	1,579	..	..	

SOUTH INDIAN RAILWAY COMPANY, LIMITED—*cont.*

Comparative statement showing the estimate of cost of Panruti-Trichinopoly Chord Railway prepared as per requirements (1) of the Railway Board and (2) the Agent, South Indian Railway—*cont.*

Length 94·79 *miles*—cont.

Heads of account.	Total cost in rupees as per requirements of Railway Board.				Total cost in rupees as per requirements of Agent, South Indian Railway.				Difference (reduction).				Remarks.
	Sub-heads.		Main heads.		Sub-heads.		Main heads.		Sub-heads.		Main heads.		
	Total cost.	Rate per mile.	Total cost.	Rate per mile.	Total cost.	Rate per mile.	Total cost.	Rate per mile.	Total cost.	Rate per mile.	Total cost.	Rate per mile.	
	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	
IX. Plant	..	..	1,16,939	1,234	..	..	1,02,758	1,084	..	..	14,181	150	Reduction only under (*e*) due to providing a minimum supply of furniture at stations.
(*a*) Engineering	16,693	166	..	..	15,693	166	..	..	..	..	..	..	
(*b*) Construction	75,832	800	..	..	75,832	800	..	..	..	..	..	..	
(*c*) Locomotive	..	..	..	..	..	..	..	..	..	..	..	..	
(*d*) Carriage and wagon	..	..	..	..	..	..	..	..	..	..	..	..	
(*e*) Station and office furniture.	26,414	268	..	..	11,233	118	..	..	14,181	150	..	..	
X. Rolling-stock	..	..	21,48,020	22,661	..	..	21,48,020	22,661	..	..	..	..	No reduction made.
(*a*) Locomotive	5,18,600	5,471	..	..	5,18,600	5,471	..	..	..	..	..	..	
(*b*) Carrige and wagon	16,29,420	17,190	..	..	16,29,420	17,190	..	..	..	..	..	..	
XI. General charges	..	..	7,93,200	8,368	..	..	7,93,200	8,368	..	..	..	..	
(*a*) Direction	1,07,700	1,136	..	..	1,07,700	1,136	..	..	..	..	..	..	
(*b*) Engineering	5,35,900	5,654	..	..	5,35,900	5,654	..	..	..	..	..	..	
(*c*) Stores	41,400	437	..	..	41,400	437	..	..	..	..	..	..	
(*d*) Audit and accounts	82,000	865	..	..	82,000	865	..	..	..	..	..	..	
(*e*) Medical and sanitation.	26,200	276	..	..	26,000	276	..	..	..	..	..	..	
(*f*) Locomotive	..	..	..	..	..	..	..	..	..	..	..	..	
(*g*) Traffic	..	..	..	..	..	..	..	..	..	..	..	..	
Grand total	1,07,34,012	1,13,239	1,07,34,012	1,13,239	84,73,302	89,391	84,73,302	89,391	22,60,710	23,848	22,60,710	23,848	
Deduct amount chargeable to revenue for proposed alterations at Panruti station.			13,100	138			13,100	138					
			1,07,20,912	1,13,101			84,60,202	89,253					

Godfrey W. Moore,
Ag. Deputy Chief Engineer,
South Indian Railway.

XV

Letter—from Mr. F. D. Fowler, Secretary to Govt., P.W.D. (Railway).
To—the Secretary, Railway Board, Simla.
Dated—the 27th May 1908.
No.—218 Ry.

With reference to a letter from the Agent, South Indian Railway, No. A.C. 1952–11/29, dated 13th May 1908, to your address a copy of which has been furnished to this Government for information, I am directed to remark that, if the proposed line from Trichinopoly to Panruti were built to the standard proposed by the Agent, the new line would carry local traffic only and act as a feeder to the main line. This would doubtless be an advantage to the South Indian Railway Company but since the proposed line will, it is hoped at no very distant date, form a part of the through route between Madras and Ceylon the adoption of his suggestion would involve practical reconstruction of the line when the through route becomes an accomplished fact.

2. The arguments advanced in the Agent's letter under reference have been fully discussed in the Consulting Engineer's note which formed an enclosure to this Government letter No. 329 Ry., dated 18th February 1907, and I am to say that no new ones having been put forward, His Excellency the Governor in Council sees no reason to alter the views already set forth in this Government's letter referred to above. I am to add that it would appear from a scrutiny of the index plan that a saving of one mile in the length of the proposed line and of six miles on the through distance between Madras and Trichinopoly could apparently be made without any additional bridging by locating the junction just south of the Ponniar river and running from that point straight to mile 12 instead of bending south to Panruti. This would make the total saving on the old route 43¼ miles in distance and (taking the present through speed between Egmore and Tuticorin, viz., 20·45 miles per hour) 2 hours 20 minutes in time. The Agent states the saving in time on the route as located to be 1⅔ hours but taking the through speed to be as stated the figure should apparently be 2 hours.

This proposed re-alignment will doubtless be investigated when construction is sanctioned.

XVI

Letter—from Mr. R. C. F. Volkers, Secretary, Railway Board.
To—the Secretary to the Government of Madras, Public Works Department (Railway).
Dated—Simla, the 22nd June 1908.
No.—1690-R.C.

I am directed to acknowledge the receipt of your No. 218 Ry., dated the 27th May 1908, and in reply I am to say that the Railway Board have requested the Agent of the South Indian Railway to obtain the views of his Board on his proposals.

2. I am to add that the Railway Board have already expressed the opinion that the line in question will form part of an important main route, and that it should be built to the standard of a main line.

Order—No. 270 Ry., dated 15th July 1908.

Recorded.

(True Extract.)

F. D. Fowler,
Secretary to Government.

Government of Madras.

PUBLIC WORKS DEPARTMENT.

RAILWAY.

Recd.	1908.	*Enclosures*	
Regd.		*Spare copies*	

G.O., No. 273 Ry., 17th July 1908.

Separation of Local from General Finance with effect from 1908-1909.

Issuing certain instructions to the Agent, South Indian Railway, in regard to District Board Railways and Surveys in connection with the Resolution of the Government of India, Finance Department, relative to the —.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

RAILWAY.

READ—the following papers :—

I

G.O., No. 72, Financial, dated 1st February 1908.

ABSTRACT.—Specifying the heads of account under which the items hitherto classified under the head "Adjusting heads" should be shown in view of the separation of Local from General Finance ordered by the Government of India in Finance Department Resolution No. 6902 A., dated 19th November 1907, and directing that the budget estimates of the Proprietary Estates Village Service fund, the Irrigation Cess fund and the Bhadrachallam Estates Village Service fund need no longer be submitted to Government through the Accountant-General.

II

Letter—from Mr. K. BALARAMA AIYAR, Govt. Examiner of Ry. Accounts.
To—the Secretary to Government, Public Works Department, Railway.
Dated—the 5th May 1908.
No.—O/938.

Order—No. 273 Ry., dated 17th July 1908.

With reference to the Government of India, Finance Department (Accounts and Finance—Estimates and Accounts), Resolution No. 6902 A., dated the 19th November 1907, relative to the separation of Local from General Finance, with effect from 1908–1909, which Resolution applies also to District Board Railways and Surveys, the following instructions will be issued to the Agent, South Indian Railway, in respect of them :—

(i) As regards Budgets and Forecasts, the Preliminary and Final Issues of the Revised and Budget Estimates and the six months' estimates should, as hitherto, be prepared in the Public Works Department Forms and be submitted by the Agent, South Indian Railway Company, to the Government of Madras, Public Works Department (Railway), on the dates given in the margin. As "Local" transactions will from 1908–1909 be adjusted under the Debt Head "Local Funds" no estimate need in future be furnished to the Accountant-General, Madras.

(*a*) Revised estimate for the current financial year and the Budget Estimate for the next financial year of Railways Capital, Revenue and Surveys, etc.—Preliminary Issue, 15th January.
(*b*) Final Issue of the Revised Estimate for the current financial year and Budget Estimate for the next financial year—Capital, Revenue, Surveys, etc.—1st May.
(*c*) Six months' estimate of Railways—Capital, Revenue, Surveys, etc.—25th October.

(ii) In regard to the adjustment of Receipts realized and Expenditure incurred by the South Indian Railway Company on account of Local Railways and Surveys the figures will be passed on to the Civil Department through the Civil Exchange Account *monthly* the details being recorded in the accounts of the Railway Company.

The same details as are now given in the schedules accompanying the monthly account current to the Accountant-General, Public Works Department, should be furnished to the Accountant-General, Madras, for the receipt and expenditure passed on to the Civil Department in the monthly exchange account; but instead of a monthly schedule for the Local transactions being sent separately as hitherto, they should be included in the Exchange Accounts.

(iii) Copies of the half yearly Capital and Revenue Accounts should be furnished by the Agent, South Indian Railway, to the Local Government.

(True Extract.)

F. D. Fowler,
Secretary to Government.

To the Agent, South Indian Railway.
,, Government Examiner of Railway Accounts, Madras.
,, Accountant-General, Madras.

Copy to the Local and Municipal Department.

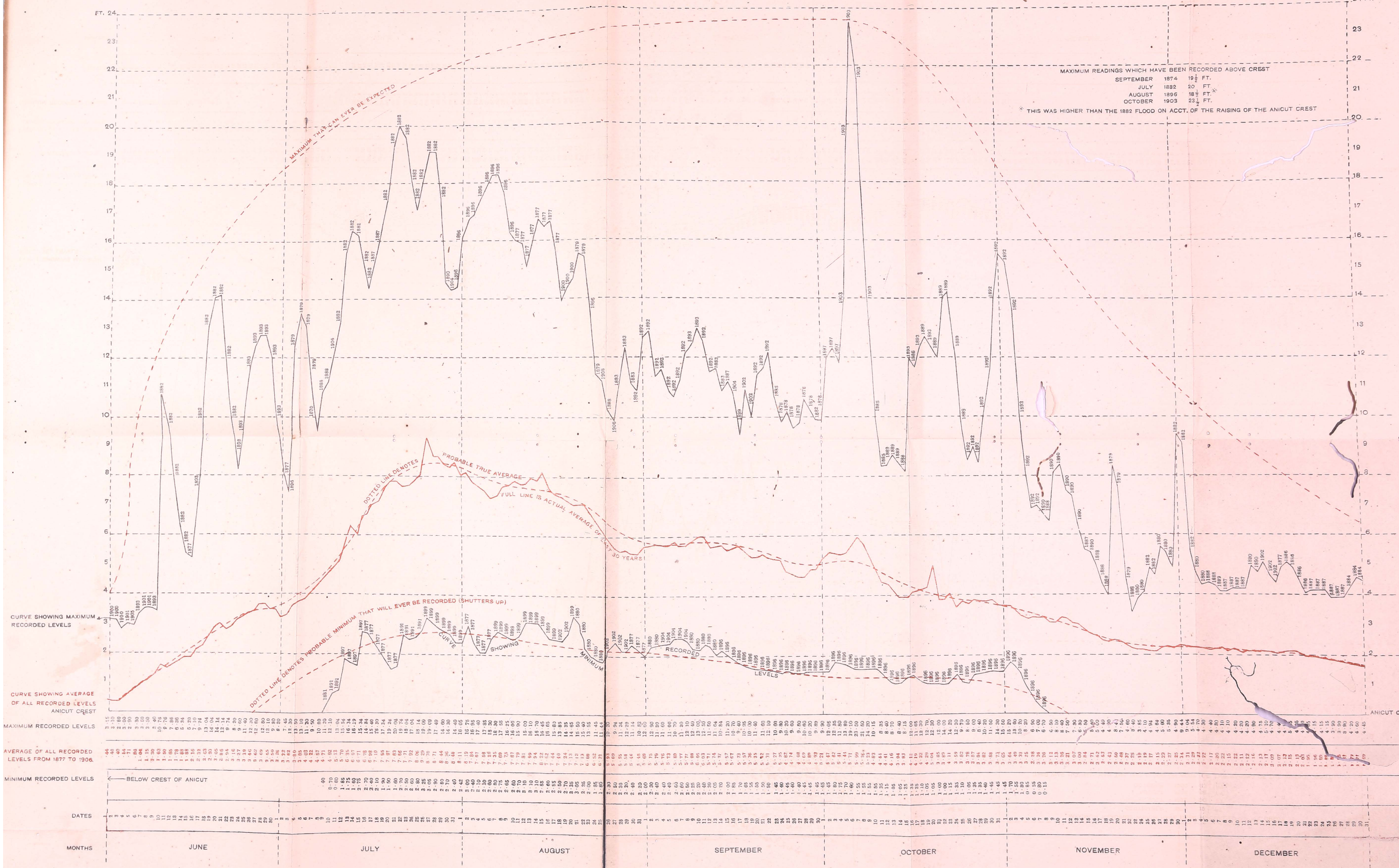
Accompaniment to S. E's No. 21 I dated 7th April 1907

DIAGRAM NO. 1

DIAGRAM
SHOWING THE
HIGHEST, LOWEST & AVERAGE OF ALL RECORDED LEVELS OVER THE BEZWADA ANICUT FOR THE MONTHS JUNE TO DECEMBER DURING THE YEARS 1877 TO 1906

SCALE { HORIZONTAL FOR EACH DAY $\frac{1}{100}$; VERTICAL FOR HEIGHTS ON ANICUT $\frac{1}{20}$ }

N. B.—THE CREST LEVEL OF ANICUT FROM 1877 TO 1890 — + 46 · 25
——DO.—— FROM 1891 TO 1893 — + 47 · 00
——DO.—— FROM 1894 TO 1896 — + 49 · 25
——DO.—— IN 1897 — + 47 · 25
——DO.—— FROM 1898 — + 47 · 50



(Signed) W. M. ELLIS, Lt. Col. R. E.
Superintending Engineer
2nd Circle
7-4-07

(Signed) C. T. MULLINGS,
Executive Engineer
Divi Division.

Reg: No. 1411
Copies — 200

Zinco. Survey Office, Madras.
1908.

Accompaniment to S. E's No. 21 I dated 10th April 1907

DIAGRAM NO. 2

COMPARATIVE READINGS OF KISTNA RIVER AT DIVI HEAD WORKS & BEZWADA ANICUT FOR 5 MONTHS JUNE 15TH TO NOVEMBER 15TH 1906

DISTANCE BETWEEN GAUGES 37¼ MILES

SCALE { HORIZONTAL FOR EACH DAY $\frac{1}{100}$; VERTICAL FOR HEIGHTS ON GAUGE $\frac{1}{20}$ }

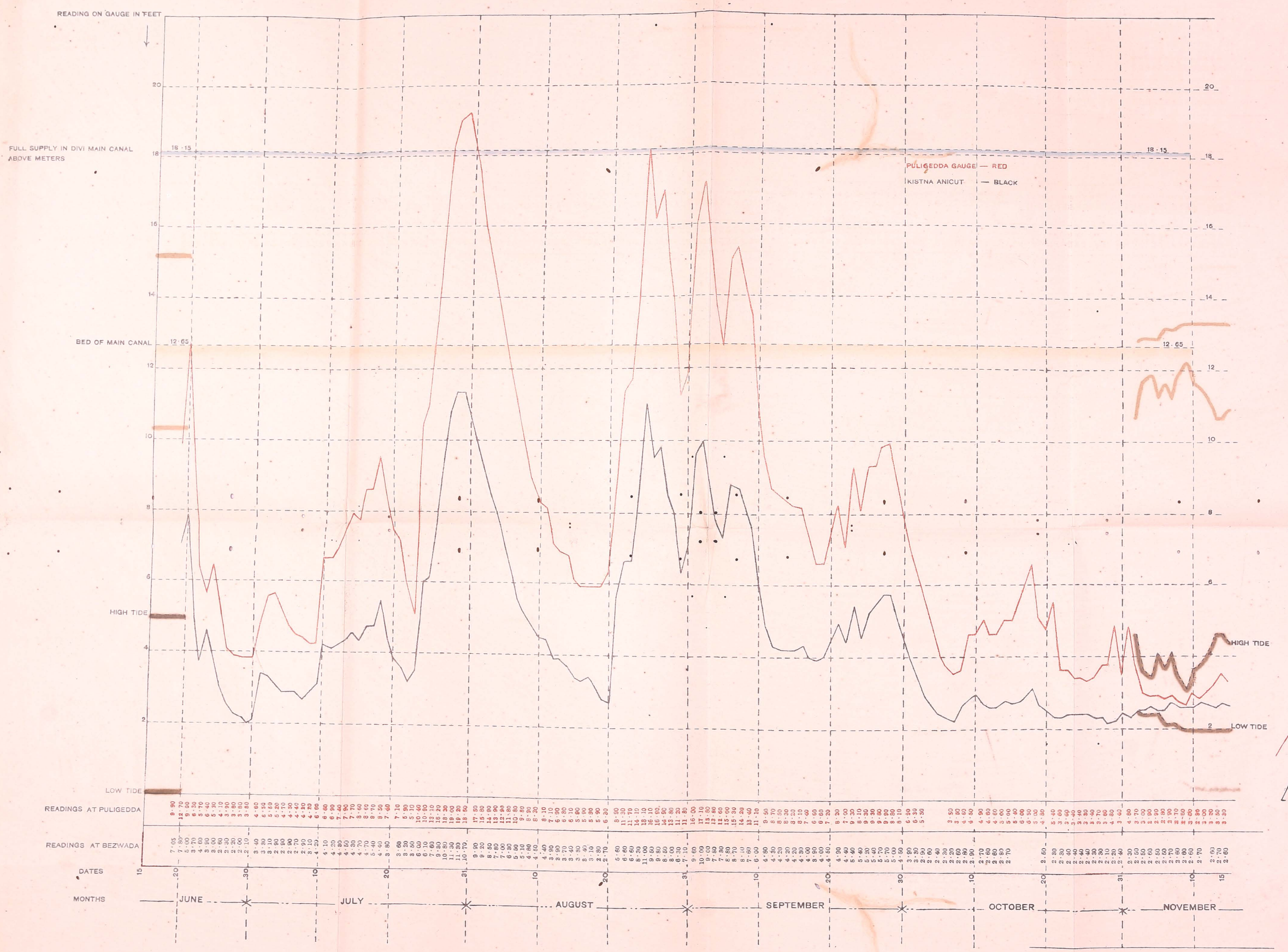
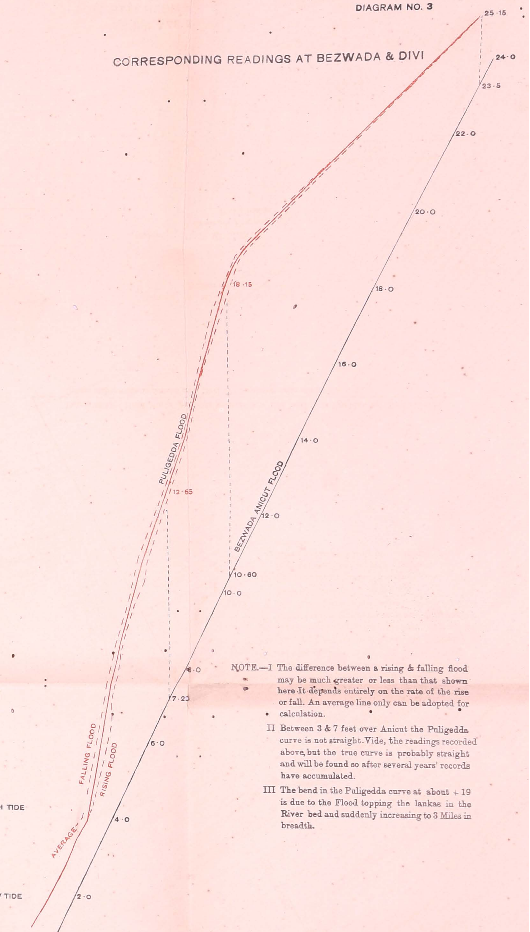


DIAGRAM NO. 3

CORRESPONDING READINGS AT BEZWADA & DIVI



NOTE.—I The difference between a rising & falling flood may be much greater or less than that shown here. It depends entirely on the rate of the rise or fall. An average line only can be adopted for calculation.

II Between 3 & 7 feet over Anicut the Puligedda curve is not straight. Vide, the readings recorded above, but the true curve is probably straight and will be found so after several years' records have accumulated.

III The bend in the Puligedda curve at about + 19 is due to the Flood topping the lankas in the River bed and suddenly increasing to 3 Miles in breadth.

Datum of Divi Head Works gauge is average low tide level at Puligedda - Mr. Reid's Zero

Datum at Bezwada is Anicut crest level 47·50 above mean sea level.

(Signed) W. M. ELLIS Lt. Col. R. E.
Superintending Engineer
2nd Circle.
7-4-07

(Signed) C. T. MULLINGS,
Executive Engineer
Divi Division.

Reg. No. 1412
Copies — 200

Zinco., Survey Office, Madras,

DIAGRAM No. 4

DIVI HEAD WORKS

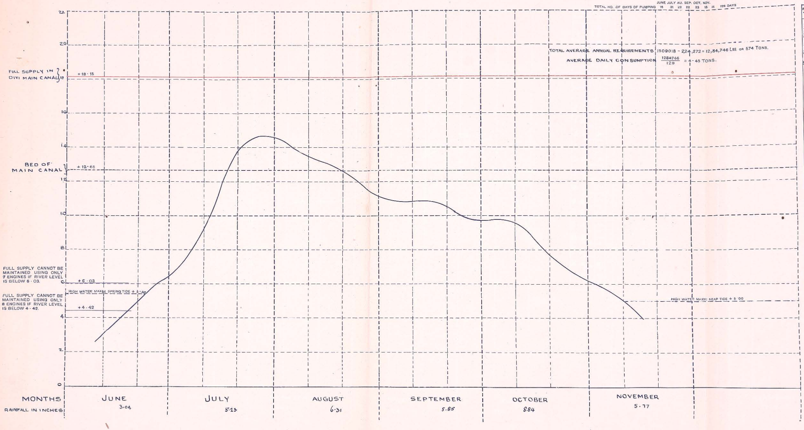
AVERAGE RIVER LEVEL AT PULIGEDDA DURING THE IRRIGATION SEASON DEDUCED FROM 80 YEARS LEVELS AT BEZWADA AND AVERAGE OIL CONSUMPTION OF 7-160 B. H. P. DIESEL OIL ENGINES

SCALE { HORIZONTAL FOR EACH DAY $\frac{1}{200}$ / VERTICAL FOR HEIGHTS OVER ANICUT $\frac{1}{40}$

ACCOMPANIMENT TO S.E's NO.21 I
DATED 10TH APRIL 1907

STATEMENT SHOWING THE REQUIREMENTS OF OIL

MONTH	TOTAL OIL REQUIREMENTS FOR THE MONTH IN lbs.	AVERAGE DAILY CONSUMPTION IN lbs.	No. OF DAYS STOPPAGE ON ACCOUNT OF RAIN	MONTHLY SAVING OF OIL DUE TO RAIN IN lbs.	REMARKS
JUNE	214536	13408	0	0	NO STOPS FOR RAIN OWING TO TRANSPLANTION SEASON
JULY	259098	8358	0	0	DO. DO.
AUGUST	208068	6712	9	60 408	—
SEPTEMBER	272664	9089	8	72 712	—
OCTOBER	353220	11394	8	91 152	OCTOBER RAIN USUALLY FALLS IN HEAVY STORMS OF SHORT DURATION SO NOT MANY DAYS STOPPAGE ARE POSSIBLE
NOVEMBER	201432	13429	0	0	NO STOPS FOR RAIN AS PUMPS CANNOT AT ANY TIME DISCHARGE FULL SUPPLY DURING THE MONTH OWING TO LOW STATE OF RIVER
	1509018		25	224 272	



FOR FULL SUPPLY WITH 7 ENGINES

CONSUMPTION IN Lbs. PER ENGINE HOUR	RIVER LEVEL	PROPORTIONAL LOAD ON ENGINE
	18·15	
19		stop–1/8
	16·63	
22½		1/8–3/16
	15·88	
25		3/16–1/4
	15·12	
29½		1/4–5/16
	14·36	
34		5/16–3/8
	13·60	
38½		3/8–7/16
	12·85	
43		7/16–1/2
	12·09	
47½		1/2–9/16
	11·33	
52		9/16–5/8
	10·57	
56½		5/8–11/16
	9·82	
61		11/16–3/4
	9·06	
65½		3/4–13/16
	8·30	
70		13/16–7/8
	7·54	
74½		7/8–13/16
	6·79	
79		15/16 FULL
	6·03	

[signature] Lt. Col: R. E.
Superintending Engineer, 2nd Circle.
7-4-07.

C. T. Mullings
Executive Engineer,
Divi Division.

S. O. 1908 { Reg. No. 1407 / Copies. 200

DIAGRAM No. 5

READINGS OF KISTNA RIVER AT DIVI HEAD WORKS
FOR THE YEAR 1892 (THE BEST ON RECORD)

SCALE { HORIZONTAL FOR EACH DAY $\frac{1}{200}$
{ VERTICAL FOR HEIGHTS OVER ANICUT $\frac{1}{40}$

ACCOMPANIMENT TO S.E's NO.21 I
DATED 10TH APRIL 1907

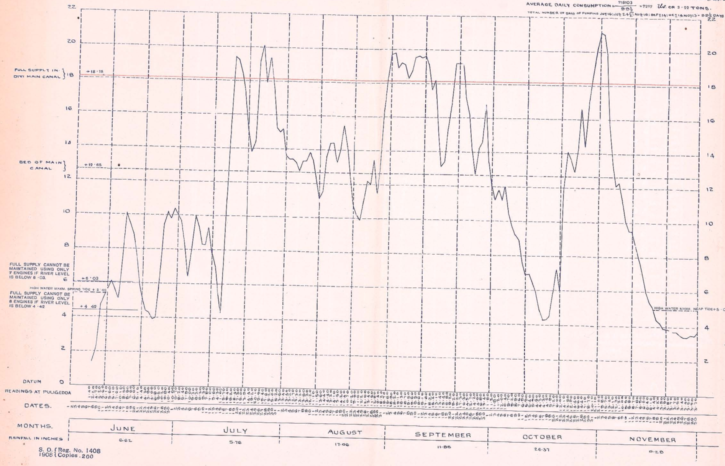
STATEMENT SHOWING THE REQUIREMENTS OF OIL

MONTH	TOTAL OIL REQUIREMENTS FOR THE MONTH IN lbs.	AVERAGE DAILY CONSUMPTION	No. OF DAYS STOPPAGE ON ACCOUNT OF			MONTHLY SAVING OF OIL DUE TO RAIN &c IN lbs.	REMARKS
			RAIN	FLOOD IN THE RIVER ABOVE F.S.L. IN THE CANAL	TOTAL		
JUNE	186102	11631	0	0	0		NO STOPS FOR RAIN OWING TO TRANSPLANTATION
JULY	206031	6646	0	6½	6½	43200	DO. DO
AUGUST	201957	6515	12	1	13	84695	RAINFALL + HIGH FLOODS ASSUMED TO OCCUR SOMETIMES ON SAME DAY.
SEPTEMBER	73080	2436	1½	14½	16	38976	DO. DO.
OCTOBER	278502	8984	14½	2½	17	152728	DO. DO.
NOVEMBER	106190	7079	0.	2	2	14,160	—— ——
	1051862		28	26½	54½	333759	

TOTAL AVERAGE ANNUAL REQUIREMENTS = 1051862 − 333759 = 718103 lbs. OR 320½ TONS SAY 321 TONS

AVERAGE DAILY CONSUMPTION = $\frac{718103}{99\frac{1}{2}}$ = 7217 lbs. OR 3·22 TONS.

TOTAL NUMBER OF DAYS OF PUMPING JUNE 16; JULY 24½; AUG 18; SEPT 14; OCT 14; NOV 13 = 99½ DAYS



FOR FULL SUPPLY WITH 7 ENGINES.		
OIL CONSUMPTION IN lbs. PER ENGINE HOUR	RIVER LEVEL.	PROPORTIONAL LOAD ON ENGINE.
x----	18·15	
19		0 TO ⅛
x----	16·63	
22½		⅛ - 3/16
x----	15·88	
25		3/16 - ¼
x----	15·12	
29½		¼ - 5/16
x----	14·36	
34		5/16 - ⅜
x----	13·60	
38½		⅜ - 7/16
x----	12·85	
43		7/16 - ½
x----	12·09	
47½		½ - 9/16
x----	11·33	
52		9/16 - ⅝
x----	10·57	
56½		⅝ - 11/16
x----	9·82	
61		11/16 - ¾
x----	9·06	
65½		¾ - 13/16
x----	8·30	
70		13/16 - ⅞
x----	7·54	
74½		⅞ - 15/16
x----	6·79	
79		15/16 FULL
v----	6·03	

[signature] Lt. Col: R. E.
Superintending Engineer, 2nd Circle,
7-4-07.

[signature]
Executive Engineer,
Divi Division.

S. O. { Reg. No. 1408
1908 { Copies . 200

DIAGRAM No. 6

READINGS OF KISTNA RIVER AT DIVI HEAD WORKS

FOR THE YEAR 1899 (THE WORST ON RECORD)

SCALE { HORIZONTAL FOR EACH DAY $\frac{1}{200}$. VERTICAL FOR HEIGHTS OVER ANICUT $\frac{1}{40}$.

ACCOMPANIMENT TO S. E's NO.21,1
DATED 10TH APRIL 1907

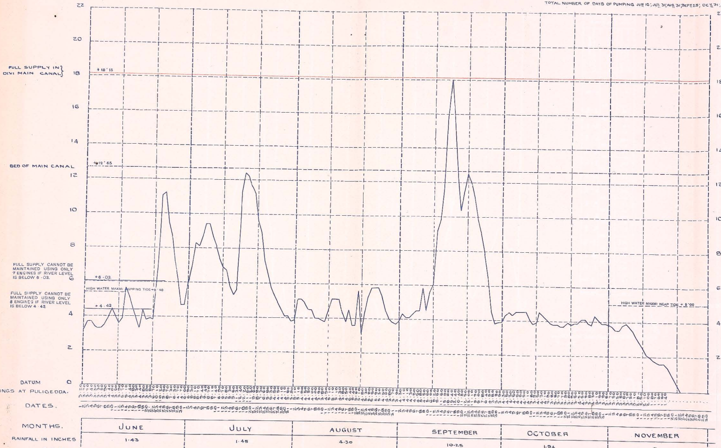
STATEMENT SHOWING THE REQUIREMENTS OF OIL

MONTH	TOTAL OIL REQUIREMENTS FOR THE MONTH IN lbs.	AVERAGE DAILY CONSUMPTION	No. OF DAYS STOPPAGE ON ACCOUNT OF			MONTHLY SAVING OF OIL DUE TO RAIN &c IN lbs.	REMARKS
			RAIN	FLOOD IN THE RIVER ABOVE F.S.L. IN THE CANAL	TOTAL		
JUNE	198870	12429¼	0	0	0	0	NO STOPS FOR RAIN OWING TO TRANSPLANTATION
JULY	357840	11543¼	0	0	0	0	DO. DO.
AUGUST	416640	13440	0	0	0	0	NO STOPS FOR RAIN AS RIVER IS TOO LOW FOR PUMPS TO DELIVER FULL SUPPLY
SEPTEMBER	335916	11197¼	5	0	5	55985	ONLY FEW STOPS FOR RAIN FOR SAME REASON
OCTOBER	416640	13440	0	0	0	0	NO STOPS FOR RAIN FOR SAME REASON
NOVEMBER	201600	13440	0	0	0	0	——
	1927506		5	0	5	55985	

TOTAL AVERAGE ANNUAL REQUIREMENTS = 1927506 − 55985 = 1871521 lbs. OR 835½ TONS SAY 836 TONS.

AVERAGE DAILY CONSUMPTION = $\frac{1871521}{149}$ = 5·61 TONS

TOTAL NUMBER OF DAYS OF PUMPING JUNE 16; JULY 31; AUG. 31; SEPT. 25; OCT. 31; NOV. 15 = 149 DAYS



FOR FULL SUPPLY WITH 7 ENGINES.

OIL CONSUMPTION IN lbs. PER ENGINE HOUR	RIVER LEVEL.	PROPORTIONAL LOAD ON ENGINE.
	18·15	
19		0 TO 1/8
	16·63	
22½		1/8 - 3/16
	15·88	
26		3/16 - 1/4
	15·12	
29½		1/4 - 5/16
	14·36	
34		5/16 - 3/8
	13·60	
38½		3/8 - 7/16
	12·85	
43		7/16 - 1/2
	12·09	
47½		1/2 - 9/16
	11·33	
52		9/16 - 5/8
	10·57	
56½		5/8 - 11/16
	9·82	
61		11/16 - 3/4
	9·06	
65½		3/4 - 13/16
	8·30	
70		13/16 - 7/8
	7·54	
74½		7/8 - 15/16
	6·78	
79		15/16 - Full
	6·03	
80		[illegible]

[signature] Lt. Col: R. E.
Superintending Engineer, 2nd Circle
7-4-07.

[signature]
Executive Engineer,
Divi Division.

S. O. { Reg. No. 1409
1908 { Copies. 200

DIAGRAM No. 7

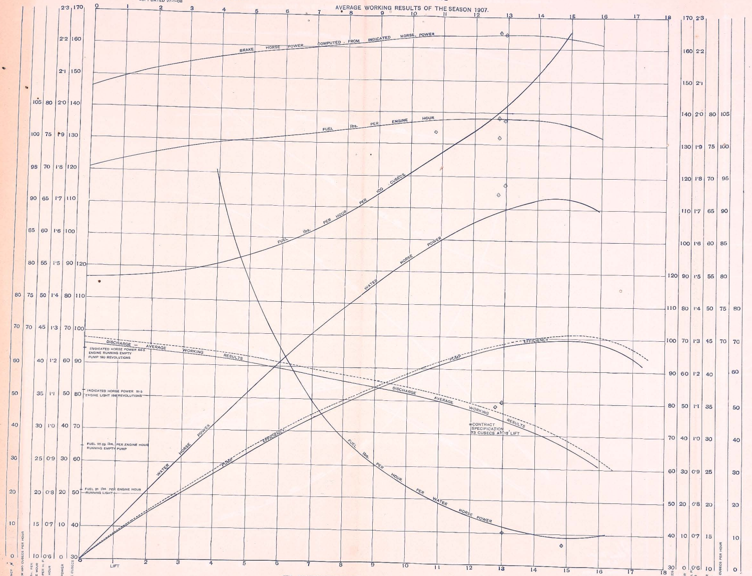
ACCOMPANIMENT TO MR. HAWKIN'S NOTE ON THE 1ST SEASONS WORKING RECEIVED WITH S. E's NO. 551 I DATED 27-1-08

DIVI PUMPING PROJECT

160 H. P. 2 CYLINDER DIESEL ENGINES 39 LOW LIFT CENTRIFUGAL PUMPS

180 REVOLS PER MINUTE

AVERAGE WORKING RESULTS OF THE SEASON 1907.



NOTE. — DISCHARGES REGISTERED BY VENTURI METER.

THE DOTTED CURVES EXCLUDE OBSERVATIONS KNOWN TO BE CONSIDERABLY BELOW THE AVERAGE FROM SOME DEFINITE CAUSE.

POINTS ◇ ARE THOSE OBTAINED AT THE OFFICIAL TRIALS

ACTUAL OBSERVATIONS TAKEN WITH LIFT VARYING FROM 4 FT. TO 15 FT.

S. O. } Reg. No. 1410
1908 } Copies.200

P. Hawkins.
6. 1. 08

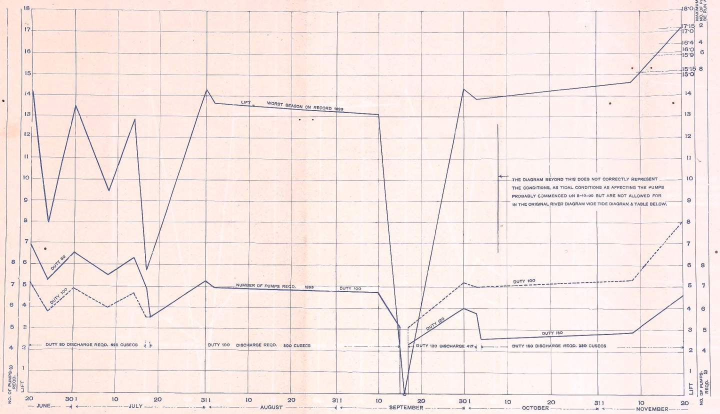
EXECUTIVE ENGINEER.
DIVI DIVISION.

DIAGRAM No. 8

DIVI PUMPING PROJECT

DIAGRAM SHOWING LIFT & NUMBER OF PUMPS REQUIRED AT VARIOUS STAGES DURING THE WORST SEASON ON RECORD 1899.

ACCOMPANIMENT TO MR. HAWKINS LETTER NO. 528 S. E.
DATED 18TH JANUARY 1908



TIDE DIAGRAM

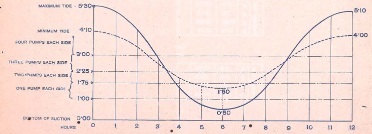


TABLE.

	NO. OF PUMPS AVAILABLE	TIME IN HOURS	AVERAGE LIFT	AVERAGE DISCHARGE PER PUMP	TOTAL DISCHARGE × NO. OF HOURS
MAXIMUM TIDE	2	3·0	16·78	54	324
	4	1·5	16·15	59	354
	6	2·20	15·53	64	845
	8	17·3	13·74	72	8719×

×7 Pumps

10242 ÷ 24=427 Cusecs
= AVERAGE DISCHARGE AVAILABLE DURING 24 HOURS
SUFFICIENT FOR 64050 ACRES AT A DUTY OF 150

	NO. OF PUMPS AVAILABLE	TIME IN HOURS	AVERAGE LIFT	AVERAGE DISCHARGE PER PUMP	TOTAL DISCHARGE × NO. OF HOURS
MINIMUM TIDE	2	2·8	16·53	56	247
	4	4·0	16·15	59	944
	6	4·2	15·53	64	1613
	8	13·0	14·42	69	6479 ×

× 7 Pumps

9283 ÷ 24=387 Cusecs
= AVERAGE DISCHARGE AVAILABLE DURING 24 HOURS
SUFFICIENT FOR 58050 ACRES AT A DUTY OF 150

R. Hawkins 18.1.08

EXECUTIVE ENGINEER,
DIVI DIVISION.

S. O. Reg. No. 1406
1908 Copies 300

Government of Madras.

PUBLIC WORKS DEPARTMENT.

(RAILWAY).

Recd.	1908.	*Enclosures*
Regd.		*Spare copies*

Letter No. 293 Ry., 30th July 1908.

New Railway lines

Forwarding to the Railway Board a list of — to be constructed out of Imperial funds.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

RAILWAY.

READ— the following papers :—

I

G.O., No. $\frac{1392}{A}$ Ry., dated 20th September 1907.

Read—the following papers :—

Letter No. 1395 *Ry., dated* 31*st July* 1905.

ABSTRACT.—Forwarding to the Railway Board a list of new lines of railways required in the Madras Presidency with a brief note on each project.

Letter No. 1570 *Ry., dated* 20*th September* 1906.

ABSTRACT.—Forwarding to the Railway Board two lists of new railway lines recommended by the Government of Madras to be constructed out of Imperial funds and by District Boards.

Telegram—from the Railway Board.
To—the Secretary to the Government of Madras, P.W.D. (Railway).
Dated—the 14th September 1907.
No.—1034 R.C.

Your letter 1570 Ry. of 20th September 1906. Please report at an early date any alteration the Madras Government may desire to make in the order of urgency and importance of new lines recommended by the local Government.

Order—No. $\frac{1392}{A}$ *Ry., dated* 20*th September* 1907.

Ordered that the following telegram be despatched to the Railway Board.

(True Extract.)

G. A. ANDERSON,
Secretary to Government.

Telegram—from the Secretary to the Government of Madras, P.W.D. (Railway).
To—the Secretary, Railway Board, Simla.
Dated—the 19th September 1907.
No.—38 A.

Your telegram numbered and dated as follows 1034 R.C. 14 instant. There is no alteration in the order of importance of lines to be constructed from Imperial funds as given in the annexure to this Government's letter 1570 Ry. of 20th September 1906.

II

Letter—from Mr. R. C. F. VOLKERS, Secretary, Railway Board.
To—the Secretary to the Government of Madras, P.W.D. (Railway).
Dated—the 14th July 1908.
No.—1891 R.C.

With reference to your telegram No. 38 A. dated the 19th September 1907, I am directed to request that the Railway Board may be informed at a very early date if the Madras Government desires to make any alterations in the order of urgency and importance of, or to make any additions to the list of, new lines of railways in the Madras Presidency which the Local Government recommends should take an early place in the programme of railway construction.

III

Letter—from Mr. F. D. FOWLER, Secy. to the Govt. of Madras, P.W.D. (Ry).
To—the Chairman, Chamber of Commerce, Madras.
Dated—the 18th July 1908.
No.—276 Ry.

I am directed to inform you that the Chairman of the Railway Board is anxious to receive early intimation of the wishes of the Madras Government in regard to the order in which new railways to be constructed out of Imperial funds should be undertaken.

2. Particulars of the projects included in the Imperial programme in September 1907 and the order in which the Madras Government then recommended that they should be undertaken are given in the margin.

(1) *Dindigul-Palni-Palghat*—

Length	111 miles.
Estimate ..	Rs. 79,00,000
Per mile	Rs. 71,210.
Prospects	3·5 per cent. at least.

(2) *Trichinopoly-Panruti*—

Length	95 miles.
Estimate	Rs. 1,08,00,000.
Per mile	Rs. 1,13,000.
Prospects	4·4 per cent.

(3) *Nanjangud-Erode*—

Length	121 miles.
Estimate	Rs. 1,23,00,000.
Per mile	Rs. 1,02,000.
Prospects	1·6 per cent. about.

3. The only new factor that has arisen in the *interim* which might be held to warrant an alteration in the order of priority is the probability that the Government of Ceylon will construct a line in the near future from Madavachi to Manaar. Having this in view, it is a matter for consideration whether the order of priority should not be altered as under :—

(1) Panruti-Trichinopoly.
(2) Trichinopoly-Ramnad.
(3) Dindigul-Palni-Palghat.
(4) Nanjangud-Erode.

Line No. 2, Trichinopoly to Ramnad, has not been surveyed; its length would be about 103 miles.

4. I am to request that the views of the Chamber as to the order in which the four projects mentioned should be constructed may be communicated to the Government of Madras at its early convenience.

IV

Telegram—from Mr. F. D. FOWLER, Secy. to the Govt. of Madras, P.W.D. (Ry,).
To—the Secretary, Railway Board.
Dated—the 22nd July 1908.
No.—16-A.

Your No. 1891 of 14th July. Information called for awaits reply from Chamber of Commerce who had to be consulted and who have been asked to expedite reply. Please wire latest date for submission of statement which will not prejudice Madras claim to fair share of grant.

V

Telegram—from the Secretary, Railway Board.
To—theSecretary to the Government of Madras, P.W.D. (Railway).
Dated—the 23rd July 1908.
No.—1984 R.C.

Your telegram 16-A of 22nd instant. Statement showing requirements of local Government in respect of new railways should reach this office by the middle of August at latest.

VI

Telegram from the Chairman, Chamber of Commerce, Madras, dated 25th July 1908.

VII

Letter—from Mr. A. J. YORKE, Chairman, Chamber of Commerce, Madras.
To—the Secretary to the Government of Madras, P.W.D. (Railway).
Dated—the 1st August 1908.

I have the honour to acknowledge receipt of your letter No. 276 Ry., dated the 18th ultimo, in which the Chamber is requested to state in which order it thinks that new railways to be constructed out of Imperial funds should be undertaken, and to confirm the following telegram despatched to you on the 25th idem :—

Referring your letter 276, dated the 18th July, Madras Chamber advocates construction in following order :

(1) Panruti-Trichinopoly.
(2) Trichinopoly-Ramnad.
(3) Dindigul-Palni-Palghat.
(4) Nanjangud-Erode.

Letter—from Mr. F. D. Fowler, Secy. to the Govt. of Madras, P.W.D. (Ry.).
To—the Secretary, Railway Board, Simla.
Dated—the 30th July 1908.
No.—293 Ry.

With reference to correspondence ending with your telegram No. 1984-R.C., dated the 23rd July 1908, I am directed to inform you that in 1906 the Madras Government recommended for construction from Imperial funds the following projects in the order given (*vide* this Government's letter No. 1570 Ry., dated the 20th September 1906) :—

(1) Dindigul-Palni-Palghat.
(2) Dhone-Kurnool.
(3) Trichinopoly-Tirukkóyilúr.
(4) Nanjangud-Erode.

2. The same projects were recommended in the same order in 1907 (*vide* this Government's telegram No. 38-A, dated 19th September 1907).

3. Since then orders have been issued for the construction of the Dhone-Kurnool which may now be eliminated. Particulars of the three remaining projects are given in the margin.

(1) Dindigul-Palni-Palghat—

Length	...	111 miles.
Estimate	...	Rs. 79,00,000.
Per mile	...	Rs. 71,210.
Prospects	...	3·5 per cent. at least.

(2) Trichinopoly-Panruti—

Length		95 miles.
Estimate	..	Rs. 1,08,00,000.
Per mile	...	Rs. 1,13,000.
Prospects	...	4·4 per cent.

(3) Nanjangud-Erode—

Length	...	121 miles.
Estimate	..	Rs. 1,23,00,000.
Per mile	...	Rs. 1,02,000.
Prospects	...	1·6 per cent. about.

4. The Government of Madras have lately been informed that the Ceylon Government intends to commence the construction of the line from Madavachi to Manaar at an early date, and as you are aware proposals are under investigation for connecting the Indian Railway system with that of Ceylon by means of ferry steamers, and it is hoped that a satisfactory scheme may be evolved at no very distant date.

5. Under these circumstances and having in view the favourable prospects of the Trichinopoly-Panruti line, this Government recommends that it should be given the first place in the programme of construction. When this line is constructed a direct connection between Trichinopoly and Ramnad follows as a natural sequence if full advantage is to be taken of the Indo-Ceylon connection.

This section of the through route (which is about 103 miles long) has not yet been surveyed, and in placing it second on the list I am to say that its position there must be regarded as subject to the result of an Engineering and Traffic survey which the Madras Government would be glad to see undertaken at a very early date.

6. As regards the remaining two lines, the importance of a connection between the Mysore and South Indian Metre-gauge systems is fully recognised, but looking to the heavy cost of its construction and consequently indifferent financial prospects, this Government considers that priority should be given to the Dindigul-Palni-Palghat line.

7. In recommending these four projects for construction in the following order which is supported by the Madras Chamber of Commerce—

(1) Panruti-Trichinopoly,
(2) Trichinopoly-Ramnad,
(3) Dindigul-Palni-Palghat,
(4) Nanjangud-Erode,

I am to express a hope that a liberal share of the Imperial grant may be allotted to this Presidency.

I have the honour to be

Sir,

Your most obedient servant,

F. D. FOWLER,
Secretary to Government.